Ralph J Deberardinis

List of Publications by Year in Descending Order

208 papers	38,171 citations	83 h-index	195 g-index
237 ext. papers	47,162 ext. citations	17.7 avg, IF	7.8 L-index

#	Paper	IF	Citations
208	Metabolic diversity within breast cancer brain-tropic cells determines metastatic fitness.. *Cell Metabolism*, **2022**, 34, 90-105.e7	24.6	2
207	Abstract P5-05-01: Metabolite profiling and RNA-seq identifies novel metabolomic-genomic biomarker and therapeutic options for rapidly proliferating breast cancers. *Cancer Research*, **2022**, 82, P5-05-01-P5-05-01	10.1	
206	Clinically relevant T cell expansion media activate distinct metabolic programs uncoupled from cellular function.. *Molecular Therapy - Methods and Clinical Development*, **2022**, 24, 380-393	6.4	0
205	SNAT7 regulates mTORC1 via macropinocytosis.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2123261119	11.5	2
204	Optimized protocol for stable isotope tracing and steady-state metabolomics in mouse HER2+ breast cancer brain metastasis.. *STAR Protocols*, **2022**, 3, 101345	1.4	
203	Detection of glucose-derived D- and L-lactate in cancer cells by the use of a chiral NMR shift reagent. *Cancer & Metabolism*, **2021**, 9, 38	5.4	1
202	A renal cell carcinoma tumorgraft platform to advance precision medicine. *Cell Reports*, **2021**, 37, 110055	10.6	4
201	Cell-autonomous immune gene expression is repressed in pulmonary neuroendocrine cells and small cell lung cancer. *Communications Biology*, **2021**, 4, 314	6.7	9
200	Isotope tracing reveals glycolysis and oxidative metabolism in childhood tumors of multiple histologies. *Med*, **2021**, 2, 395-410	31.7	5
199	Mitochondrial NADP is essential for proline biosynthesis during cell growth. *Nature Metabolism*, **2021**, 3, 571-585	14.6	20
198	Metabolic impact of pathogenic variants in the mitochondrial glutamyl-tRNA synthetase EARS2. *Journal of Inherited Metabolic Disease*, **2021**, 44, 949-960	5.4	1
197	Regulation of branched-chain amino acid metabolism by hypoxia-inducible factor in glioblastoma. *Cellular and Molecular Life Sciences*, **2021**, 78, 195-206	10.3	27
196	Guanosine triphosphate links MYC-dependent metabolic and ribosome programs in small-cell lung cancer. *Journal of Clinical Investigation*, **2021**, 131,	15.9	15
195	A pathogenic UFSP2 variant in an autosomal recessive form of pediatric neurodevelopmental anomalies and epilepsy. *Genetics in Medicine*, **2021**, 23, 900-908	8.1	2
194	The major cap-binding protein eIF4E regulates lipid homeostasis and diet-induced obesity. *Nature Metabolism*, **2021**, 3, 244-257	14.6	9
193	Metabolic Plasticity of Neutrophils: Relevance to Pathogen Responses and Cancer. *Trends in Cancer*, **2021**, 7, 700-713	12.5	7
192	Stable isotope tracing to assess tumor metabolism in vivo. *Nature Protocols*, **2021**, 16, 5123-5145	18.8	4

191	Profiling Carbohydrate Metabolism in Liver and Hepatocellular Carcinoma with [13C]-Glycerate Probes. *Analysis & Sensing*, **2021**, 1, 196		2
190	1-Methylnicotinamide is an immune regulatory metabolite in human ovarian cancer. *Science Advances*, **2021**, 7,	14.3	13
189	EWS-FLI1-regulated Serine Synthesis and Exogenous Serine are Necessary for Ewing Sarcoma Cellular Proliferation and Tumor Growth. *Molecular Cancer Therapeutics*, **2020**, 19, 1520-1529	6.1	13
188	Using arterial-venous analysis to characterize cancer metabolic consumption in patients. *Nature Communications*, **2020**, 11, 3169	17.4	12
187	The transcription factors aryl hydrocarbon receptor and MYC cooperate in the regulation of cellular metabolism. *Journal of Biological Chemistry*, **2020**, 295, 12398-12407	5.4	2
186	N-Acetyl cysteine abrogates silver-induced reactive oxygen species in human cells without altering silver-based antimicrobial activity. *Toxicology Letters*, **2020**, 332, 118-129	4.4	1
185	Tumor Microenvironment, Metabolism, and Immunotherapy. *New England Journal of Medicine*, **2020**, 382, 869-871	59.2	63
184	Assessment of Rapid Hepatic Glycogen Synthesis in Humans Using Dynamic C Magnetic Resonance Spectroscopy. *Hepatology Communications*, **2020**, 4, 425-433	6	5
183	Glycine by MR spectroscopy is an imaging biomarker of glioma aggressiveness. *Neuro-Oncology*, **2020**, 22, 1018-1029	1	13
182	Metabolic reprogramming and cancer progression. *Science*, **2020**, 368,	33.3	360
181	ketobutyrate links alterations in cystine metabolism to glucose oxidation in mtDNA mutant cells. *Metabolic Engineering*, **2020**, 60, 157-167	9.7	2
180	Mitochondrial fatty acid synthesis coordinates oxidative metabolism in mammalian mitochondria. *ELife*, **2020**, 9,	8.9	20
179	A tribute to Beth Levine (19602020). *Journal of Clinical Investigation*, **2020**, 130, 4517-4518	15.9	78
178	Vitamin B6-dependent epilepsy due to pyridoxal phosphate-binding protein (PLPBP) defect - First case report from Pakistan and review of literature. *Annals of Medicine and Surgery*, **2020**, 60, 721-727	2	2
177	Mechanical regulation of glycolysis via cytoskeleton architecture. *Nature*, **2020**, 578, 621-626	50.4	137
176	We need to talk about the Warburg effect. *Nature Metabolism*, **2020**, 2, 127-129	14.6	205
175	p53 deficiency triggers dysregulation of diverse cellular processes in physiological oxygen. *Journal of Cell Biology*, **2020**, 219,	7.3	12
174	Does Tumor FDG-PET Avidity Represent Enhanced Glycolytic Metabolism in Non-Small Cell Lung Cancer?. *Annals of Thoracic Surgery*, **2020**, 109, 1019-1025	2.7	9

173	Metabolic heterogeneity confers differences in melanoma metastatic potential. *Nature*, **2020**, 577, 115-120	50.4	141
172	Leveraging insights into cancer metabolism-a symposium report. *Annals of the New York Academy of Sciences*, **2020**, 1462, 5-13	6.5	1
171	The hexosamine biosynthesis pathway is a targetable liability in KRAS/LKB1 mutant lung cancer. *Nature Metabolism*, **2020**, 2, 1401-1412	14.6	26
170	Glutamine uptake and utilization of human mesenchymal glioblastoma in orthotopic mouse model. *Cancer & Metabolism*, **2020**, 8, 9	5.4	9
169	Concentration-dependent Early Antivascular and Antitumor Effects of Itraconazole in Non-Small Cell Lung Cancer. *Clinical Cancer Research*, **2020**, 26, 6017-6027	12.9	7
168	Mechanisms and Implications of Metabolic Heterogeneity in Cancer. *Cell Metabolism*, **2019**, 30, 434-446	24.6	159
167	A Novel Mitochondrial Inhibitor Blocks MAPK Pathway and Overcomes MAPK Inhibitor Resistance in Melanoma. *Clinical Cancer Research*, **2019**, 25, 6429-6442	12.9	30
166	Metabolic Diversity in Human Non-Small Cell Lung Cancer Cells. *Molecular Cell*, **2019**, 76, 838-851.e5	17.6	51
165	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	17.6	15
164	MYC-Driven Small-Cell Lung Cancer is Metabolically Distinct and Vulnerable to Arginine Depletion. *Clinical Cancer Research*, **2019**, 25, 5107-5121	12.9	56
163	Loss of EZH2 Reprograms BCAA Metabolism to Drive Leukemic Transformation. *Cancer Discovery*, **2019**, 9, 1228-1247	24.4	61
162	LKB1 and KEAP1/NRF2 Pathways Cooperatively Promote Metabolic Reprogramming with Enhanced Glutamine Dependence in -Mutant Lung Adenocarcinoma. *Cancer Research*, **2019**, 79, 3251-3267	10.1	103
161	Functional Assessment of Lipoyltransferase-1 Deficiency in Cells, Mice, and Humans. *Cell Reports*, **2019**, 27, 1376-1386.e6	10.6	19
160	Autophagy Regulation of Metabolism Is Required for CD8 T Cell Anti-tumor Immunity. *Cell Reports*, **2019**, 27, 502-513.e5	10.6	76
159	Evidence for an alternative fatty acid desaturation pathway increasing cancer plasticity. *Nature*, **2019**, 566, 403-406	50.4	187
158	MYC promotes tryptophan uptake and metabolism by the kynurenine pathway in colon cancer. *Genes and Development*, **2019**, 33, 1236-1251	12.6	65
157	p63 and SOX2 Dictate Glucose Reliance and Metabolic Vulnerabilities in Squamous Cell Carcinomas. *Cell Reports*, **2019**, 28, 1860-1878.e9	10.6	35
156	IMP dehydrogenase-2 drives aberrant nucleolar activity and promotes tumorigenesis in glioblastoma. *Nature Cell Biology*, **2019**, 21, 1003-1014	23.4	51

155	Systematic Analysis of Gene Expression in Lung Adenocarcinoma and Squamous Cell Carcinoma with a Case Study of and. *Cancers*, **2019**, 11,	6.6	5
154	AIF: an acquired metabolic liability in lung cancer. *Cell Research*, **2019**, 29, 607-608	24.7	
153	Induction of LEF1 by MYC activates the WNT pathway and maintains cell proliferation. *Cell Communication and Signaling*, **2019**, 17, 129	7.5	15
152	Metabolic Profiling Using Stable Isotope Tracing Reveals Distinct Patterns of Glucose Utilization by Physiologically Activated CD8 T Cells. *Immunity*, **2019**, 51, 856-870.e5	32.3	122
151	Active pyruvate dehydrogenase and impaired gluconeogenesis in orthotopic hepatomas of rats. *Metabolism: Clinical and Experimental*, **2019**, 101, 153993	12.7	6
150	Molecular Profiling Reveals Unique Immune and Metabolic Features of Melanoma Brain Metastases. *Cancer Discovery*, **2019**, 9, 628-645	24.4	124
149	Reactive metabolite production is a targetable liability of glycolytic metabolism in lung cancer. *Nature Communications*, **2019**, 10, 5604	17.4	25
148	Lkb1 deficiency confers glutamine dependency in polycystic kidney disease. *Nature Communications* , **2018**, 9, 814	17.4	30
147	Differential glucose requirement in skin homeostasis and injury identifies a therapeutic target for psoriasis. *Nature Medicine*, **2018**, 24, 617-627	50.5	58
146	Chemistry-First Approach for Nomination of Personalized Treatment in Lung Cancer. *Cell*, **2018**, 173, 864-878.e29	56.2	58
145	RIPK1-mediated induction of mitophagy compromises the viability of extracellular-matrix-detached cells. *Nature Cell Biology*, **2018**, 20, 272-284	23.4	46
144	Molecular mechanisms of cell death: recommendations of the Nomenclature Committee on Cell Death 2018. *Cell Death and Differentiation*, **2018**, 25, 486-541	12.7	2160
143	Applications of metabolomics to study cancer metabolism. *Biochimica Et Biophysica Acta: Reviews on Cancer*, **2018**, 1870, 2-14	11.2	86
142	Metabolic strategies of melanoma cells: Mechanisms, interactions with the tumor microenvironment, and therapeutic implications. *Pigment Cell and Melanoma Research*, **2018**, 31, 11-30	4.5	88
141	Metabolic regulation of transcription through compartmentalized NAD biosynthesis. *Science*, **2018**, 360,	33.3	111
140	Isotope Tracing of Human Clear Cell Renal Cell Carcinomas Demonstrates Suppressed Glucose Oxidation In Vivo. *Cell Metabolism*, **2018**, 28, 793-800.e2	24.6	118
139	Lipoic acid metabolism and mitochondrial redox regulation. *Journal of Biological Chemistry*, **2018**, 293, 7522-7530	5.4	99
138	Gain-of-function variants in the ODC1 gene cause a syndromic neurodevelopmental disorder associated with macrocephaly, alopecia, dysmorphic features, and neuroimaging abnormalities. *American Journal of Medical Genetics, Part A*, **2018**, 176, 2554-2560	2.5	15

137	Transmembrane Protease TMPRSS11B Promotes Lung Cancer Growth by Enhancing Lactate Export and Glycolytic Metabolism. *Cell Reports*, **2018**, 25, 2223-2233.e6	10.6	19
136	Loss of a Negative Regulator of mTORC1 Induces Aerobic Glycolysis and Altered Fiber Composition in Skeletal Muscle. *Cell Reports*, **2018**, 23, 1907-1914	10.6	25
135	Inosine Monophosphate Dehydrogenase Dependence in a Subset of Small Cell Lung Cancers. *Cell Metabolism*, **2018**, 28, 369-382.e5	24.6	76
134	Chronic innate immune activation of TBK1 suppresses mTORC1 activity and dysregulates cellular metabolism. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 746-751	11.5	39
133	Lipid sensing by mTOR complexes via synthesis of phosphatidic acid. *Journal of Biological Chemistry*, **2017**, 292, 6303-6311	5.4	70
132	Understanding the Intersections between Metabolism and Cancer Biology. *Cell*, **2017**, 168, 657-669	56.2	971
131	Regulation of mitochondrial biogenesis in erythropoiesis by mTORC1-mediated protein translation. *Nature Cell Biology*, **2017**, 19, 626-638	23.4	88
130	Biomarker Accessible and Chemically Addressable Mechanistic Subtypes of BRAF Melanoma. *Cancer Discovery*, **2017**, 7, 832-851	24.4	31
129	Cytochrome c Oxidase Activity Is a Metabolic Checkpoint that Regulates Cell Fate Decisions During T Cell Activation and Differentiation. *Cell Metabolism*, **2017**, 25, 1254-1268.e7	24.6	83
128	CPS1 maintains pyrimidine pools and DNA synthesis in KRAS/LKB1-mutant lung cancer cells. *Nature*, **2017**, 546, 168-172	50.4	136
127	Using a novel NQO1 bioactivatable drug, beta-lapachone (ARQ761), to enhance chemotherapeutic effects by metabolic modulation in pancreatic cancer. *Journal of Surgical Oncology*, **2017**, 116, 83-88	2.8	17
126	Oxidation of [U- C]glucose in the human brain at 7T under steady state conditions. *Magnetic Resonance in Medicine*, **2017**, 78, 2065-2071	4.4	20
125	Lactate Metabolism in Human Lung Tumors. *Cell*, **2017**, 171, 358-371.e9	56.2	568
124	The abundance of metabolites related to protein methylation correlates with the metastatic capacity of human melanoma xenografts. *Science Advances*, **2017**, 3, eaao5268	14.3	28
123	Ascorbate regulates haematopoietic stem cell function and leukaemogenesis. *Nature*, **2017**, 549, 476-481	50.4	272
122	Engineering approaches to study cancer metabolism. *Metabolic Engineering*, **2017**, 43, 93	9.7	2
121	The NQO1 bioactivatable drug, -lapachone, alters the redox state of NQO1+ pancreatic cancer cells, causing perturbation in central carbon metabolism. *Journal of Biological Chemistry*, **2017**, 292, 18203-18216	5.4	41
120	Control of intestinal stem cell function and proliferation by mitochondrial pyruvate metabolism. *Nature Cell Biology*, **2017**, 19, 1027-1036	23.4	152

119	Hypoxia induces heart regeneration in adult mice. *Nature*, **2017**, 541, 222-227	50.4	378
118	Quantitative metabolic flux analysis reveals an unconventional pathway of fatty acid synthesis in cancer cells deficient for the mitochondrial citrate transport protein. *Metabolic Engineering*, **2017**, 43, 198-207	9.7	52
117	Analyzing Tumor Metabolism In Vivo. *Annual Review of Cancer Biology*, **2017**, 1, 99-117	13.3	26
116	Addressing metabolic heterogeneity in clear cell renal cell carcinoma with quantitative magnetic resonance imaging.. *Journal of Clinical Oncology*, **2017**, 35, 460-460	2.2	
115	Tetrameric Acetyl-CoA Acetyltransferase 1 Is Important for Tumor Growth. *Molecular Cell*, **2016**, 64, 859-874	17.6	42
114	Fundamentals of cancer metabolism. *Science Advances*, **2016**, 2, e1600200	14.3	1280
113	Proliferating Cells Conserve Nitrogen to Support Growth. *Cell Metabolism*, **2016**, 23, 957-958	24.6	4
112	Cutting Edge: Critical Role of Glycolysis in Human Plasmacytoid Dendritic Cell Antiviral Responses. *Journal of Immunology*, **2016**, 196, 2004-9	5.3	63
111	Metabolic Heterogeneity in Human Lung Tumors. *Cell*, **2016**, 164, 681-94	56.2	593
110	TCA Cycle and Mitochondrial Membrane Potential Are Necessary for Diverse Biological Functions. *Molecular Cell*, **2016**, 61, 199-209	17.6	269
109	Cancer-Specific Production of N-Acetylaspartate via NAT8L Overexpression in Non-Small Cell Lung Cancer and Its Potential as a Circulating Biomarker. *Cancer Prevention Research*, **2016**, 9, 43-52	3.2	24
108	Mitochondria Coordinate Intracellular Metabolism and Epigenetic Gene Regulation during Erythropoiesis. *Blood*, **2016**, 128, 1038-1038	2.2	
107	Meta-analysis of clinical metabolic profiling studies in cancer: challenges and opportunities. *EMBO Molecular Medicine*, **2016**, 8, 1134-1142	12	57
106	Evidence of Glycolysis Up-Regulation and Pyruvate Mitochondrial Oxidation Mismatch During Mechanical Unloading of the Failing Human Heart: Implications for Cardiac Reloading and Conditioning. *JACC Basic To Translational Science*, **2016**, 1, 432-444	8.7	65
105	Hepatic gluconeogenesis influences (13)C enrichment in lactate in human brain tumors during metabolism of [1,2-(13)C]acetate. *Neurochemistry International*, **2016**, 97, 133-6	4.4	6
104	Reductive carboxylation supports redox homeostasis during anchorage-independent growth. *Nature*, **2016**, 532, 255-8	50.4	332
103	Liposuction: Extracellular Fat Removal Promotes Proliferation. *Cell Chemical Biology*, **2016**, 23, 431-2	8.2	2
102	Mutations in mitochondrial enzyme GPT2 cause metabolic dysfunction and neurological disease with developmental and progressive features. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E5598-607	11.5	32

101	Blocking fatty acid synthesis reduces lung tumor growth in mice. *Nature Medicine*, **2016**, 22, 1077-1078	50.5	6
100	Glutathione Depletion, Pentose Phosphate Pathway Activation, and Hemolysis in Erythrocytes Protecting Cancer Cells from Vitamin C-induced Oxidative Stress. *Journal of Biological Chemistry*, **2016**, 291, 22861-22867	5.4	29
99	Fatty Acid Oxidation Mediated by Acyl-CoA Synthetase Long Chain 3 Is Required for Mutant KRAS Lung Tumorigenesis. *Cell Reports*, **2016**, 16, 1614-1628	10.6	123
98	A roadmap for interpreting (13)C metabolite labeling patterns from cells. *Current Opinion in Biotechnology*, **2015**, 34, 189-201	11.4	368
97	Metabolic dysregulation in monogenic disorders and cancer - finding method in madness. *Nature Reviews Cancer*, **2015**, 15, 440-8	31.3	66
96	Conditions for (13)C NMR detection of 2-hydroxyglutarate in tissue extracts from isocitrate dehydrogenase-mutated gliomas. *Analytical Biochemistry*, **2015**, 481, 4-6	3.1	8
95	D2HGDH regulates alpha-ketoglutarate levels and dioxygenase function by modulating IDH2. *Nature Communications*, **2015**, 6, 7768	17.4	47
94	Metabolic pathways promoting cancer cell survival and growth. *Nature Cell Biology*, **2015**, 17, 351-9	23.4	785
93	Metabolism: Growth in the fat lane. *Nature*, **2015**, 520, 165-6	50.4	3
92	Metabolic reprogramming induces resistance to anti-NOTCH1 therapies in T cell acute lymphoblastic leukemia. *Nature Medicine*, **2015**, 21, 1182-9	50.5	139
91	PEPCK Coordinates the Regulation of Central Carbon Metabolism to Promote Cancer Cell Growth. *Molecular Cell*, **2015**, 60, 571-83	17.6	126
90	The cancer cell @nergy grid QTGF-□ signaling coordinates metabolism for migration. *Molecular and Cellular Oncology*, **2015**, 2, e981994	1.2	15
89	6-Phosphogluconate dehydrogenase links oxidative PPP, lipogenesis and tumour growth by inhibiting LKB1-AMPK signalling. *Nature Cell Biology*, **2015**, 17, 1484-96	23.4	153
88	Targeting glutamine metabolism sensitizes pancreatic cancer to PARP-driven metabolic catastrophe induced by □apachone. *Cancer & Metabolism*, **2015**, 3, 12	5.4	83
87	A nanobuffer reporter library for fine-scale imaging and perturbation of endocytic organelles. *Nature Communications*, **2015**, 6, 8524	17.4	57
86	Oxidative stress inhibits distant metastasis by human melanoma cells. *Nature*, **2015**, 527, 186-91	50.4	681
85	Tumor-selective use of DNA base excision repair inhibition in pancreatic cancer using the NQO1 bioactivatable drug, □apachone. *Scientific Reports*, **2015**, 5, 17066	4.9	40
84	In vivo analysis of lung cancer metabolism: nothing like the real thing. *Journal of Clinical Investigation*, **2015**, 125, 495-7	15.9	13

83	From "N of 1" to N of more. *Journal of Physical Education and Sports Management*, **2015**, 1, a000521	2.8	2
82	Metabolic plasticity maintains proliferation in pyruvate dehydrogenase deficient cells. *Cancer & Metabolism*, **2015**, 3, 7	5.4	38
81	Hyperpolarized (13)C Magnetic Resonance and Its Use in Metabolic Assessment of Cultured Cells and Perfused Organs. *Methods in Enzymology*, **2015**, 561, 73-106	1.7	28
80	Metformin Antagonizes Cancer Cell Proliferation by Suppressing Mitochondrial-Dependent Biosynthesis. *PLoS Biology*, **2015**, 13, e1002309	9.7	142
79	Hypoxic metabolism in human hematopoietic stem cells. *Cell and Bioscience*, **2015**, 5, 39	9.8	47
78	Mechanism by which a recently discovered allosteric inhibitor blocks glutamine metabolism in transformed cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 394-9	11.5	52
77	Glutamate dehydrogenase 1 signals through antioxidant glutathione peroxidase 1 to regulate redox homeostasis and tumor growth. *Cancer Cell*, **2015**, 27, 257-70	24.3	194
76	LKB1 loss promotes endometrial cancer progression via CCL2-dependent macrophage recruitment. *Journal of Clinical Investigation*, **2015**, 125, 4063-76	15.9	47
75	Quantitative Proteomic and Transcriptomic Analysis Reveals Post-Transcriptional Regulation of Mitochondrial Biogenesis during Erythropoiesis. *Blood*, **2015**, 126, 47-47	2.2	
74	Both GLS silencing and GLS2 overexpression synergize with oxidative stress against proliferation of glioma cells. *Journal of Molecular Medicine*, **2014**, 92, 277-90	5.5	58
73	A nanoparticle-based strategy for the imaging of a broad range of tumours by nonlinear amplification of microenvironment signals. *Nature Materials*, **2014**, 13, 204-12	27	590
72	A role for the mitochondrial pyruvate carrier as a repressor of the Warburg effect and colon cancer cell growth. *Molecular Cell*, **2014**, 56, 400-413	17.6	221
71	Simultaneous steady-state and dynamic 13C NMR can differentiate alternative routes of pyruvate metabolism in living cancer cells. *Journal of Biological Chemistry*, **2014**, 289, 6212-24	5.4	44
70	Glutamine oxidation maintains the TCA cycle and cell survival during impaired mitochondrial pyruvate transport. *Molecular Cell*, **2014**, 56, 414-424	17.6	376
69	Analysis of hypoxia-induced metabolic reprogramming. *Methods in Enzymology*, **2014**, 542, 425-55	1.7	46
68	Inhibition of cancer cell proliferation by PPARβ/δ is mediated by a metabolic switch that increases reactive oxygen species levels. *Cell Metabolism*, **2014**, 20, 650-61	24.6	88
67	Lysine acetylation activates 6-phosphogluconate dehydrogenase to promote tumor growth. *Molecular Cell*, **2014**, 55, 552-65	17.6	78
66	Q&A: Targeting metabolism to diagnose and treat cancer. *Cancer & Metabolism*, **2014**, 2, 5	5.4	3

65	A mitochondrial RNAi screen defines cellular bioenergetic determinants and identifies an adenylate kinase as a key regulator of ATP levels. *Cell Reports*, **2014**, 7, 907-17	10.6	50
64	Oxidation of alpha-ketoglutarate is required for reductive carboxylation in cancer cells with mitochondrial defects. *Cell Reports*, **2014**, 7, 1679-1690	10.6	216
63	Profilin 1 is essential for retention and metabolism of mouse hematopoietic stem cells in bone marrow. *Blood*, **2014**, 123, 992-1001	2.2	32
62	Real-time detection of hepatic gluconeogenic and glycogenolytic states using hyperpolarized [2-13C]dihydroxyacetone. *Journal of Biological Chemistry*, **2014**, 289, 35859-67	5.4	45
61	MCT4 defines a glycolytic subtype of pancreatic cancer with poor prognosis and unique metabolic dependencies. *Cell Reports*, **2014**, 9, 2233-49	10.6	130
60	Acetate is a bioenergetic substrate for human glioblastoma and brain metastases. *Cell*, **2014**, 159, 1603-14	56.2	457
59	MAVS, cGAS, and endogenous retroviruses in T-independent B cell responses. *Science*, **2014**, 346, 1486-92	33.3	87
58	The gut commensal Bacteroides thetaiotaomicron exacerbates enteric infection through modification of the metabolic landscape. *Cell Host and Microbe*, **2014**, 16, 759-69	23.4	171
57	In vivo detection of citrate in brain tumors by 1H magnetic resonance spectroscopy at 3T. *Magnetic Resonance in Medicine*, **2014**, 72, 316-23	4.4	8
56	A novel radiotracer to image glycogen metabolism in tumors by positron emission tomography. *Cancer Research*, **2014**, 74, 1319-28	10.1	30
55	Role of PFKFB3-driven glycolysis in vessel sprouting. *Cell*, **2013**, 154, 651-63	56.2	798
54	Systematic identification of molecular subtype-selective vulnerabilities in non-small-cell lung cancer. *Cell*, **2013**, 155, 552-66	56.2	129
53	AMPK is a negative regulator of the Warburg effect and suppresses tumor growth in vivo. *Cell Metabolism*, **2013**, 17, 113-24	24.6	593
52	A comparative study of short- and long-TE □H MRS at 3 T for in vivo detection of 2-hydroxyglutarate in brain tumors. *NMR in Biomedicine*, **2013**, 26, 1242-50	4.4	63
51	The proto-oncometabolite fumarate binds glutathione to amplify ROS-dependent signaling. *Molecular Cell*, **2013**, 51, 236-48	17.6	195
50	Cancer. Silencing a metabolic oncogene. *Science*, **2013**, 340, 558-9	33.3	11
49	Mitochondrial reactive oxygen species promote epidermal differentiation and hair follicle development. *Science Signaling*, **2013**, 6, ra8	8.8	204
48	Glutamine and cancer: cell biology, physiology, and clinical opportunities. *Journal of Clinical Investigation*, **2013**, 123, 3678-84	15.9	710

47	Spectrum of mutations in the renin-angiotensin system genes in autosomal recessive renal tubular dysgenesis. *Human Mutation*, **2012**, 33, 316-26	4.7	68
46	Glucose metabolism via the pentose phosphate pathway, glycolysis and Krebs cycle in an orthotopic mouse model of human brain tumors. *NMR in Biomedicine*, **2012**, 25, 1177-86	4.4	57
45	Metabolism of [U-13 C]glucose in human brain tumors in vivo. *NMR in Biomedicine*, **2012**, 25, 1234-44	4.4	229
44	Genetically-defined metabolic reprogramming in cancer. *Trends in Endocrinology and Metabolism*, **2012**, 23, 552-9	8.8	60
43	Phosphoglycerate mutase 1 coordinates glycolysis and biosynthesis to promote tumor growth. *Cancer Cell*, **2012**, 22, 585-600	24.3	268
42	A mitochondrial power play in lymphoma. *Cancer Cell*, **2012**, 22, 423-4	24.3	5
41	Cellular metabolism and disease: what do metabolic outliers teach us?. *Cell*, **2012**, 148, 1132-44	56.2	509
40	Analysis of tumor metabolism reveals mitochondrial glucose oxidation in genetically diverse human glioblastomas in the mouse brain in vivo. *Cell Metabolism*, **2012**, 15, 827-37	24.6	389
39	The G protein-coupled taste receptor T1R1/T1R3 regulates mTORC1 and autophagy. *Molecular Cell*, **2012**, 47, 851-62	17.6	129
38	2-hydroxyglutarate detection by magnetic resonance spectroscopy in IDH-mutated patients with gliomas. *Nature Medicine*, **2012**, 18, 624-9	50.5	584
37	The hypoxic epicardial and subepicardial microenvironment. *Journal of Cardiovascular Translational Research*, **2012**, 5, 654-65	3.3	46
36	Comparison of kinetic models for analysis of pyruvate-to-lactate exchange by hyperpolarized 13 C NMR. *NMR in Biomedicine*, **2012**, 25, 1286-94	4.4	89
35	Good neighbours in the tumour stroma reduce oxidative stress. *Nature Cell Biology*, **2012**, 14, 235-6	23.4	9
34	Reductive carboxylation supports growth in tumour cells with defective mitochondria. *Nature*, **2011** , 481, 385-8	50.4	853
33	Analysis of cancer metabolism by imaging hyperpolarized nuclei: prospects for translation to clinical research. *Neoplasia*, **2011**, 13, 81-97	6.4	570
32	Serine metabolism: some tumors take the road less traveled. *Cell Metabolism*, **2011**, 14, 285-6	24.6	73
31	Role of glutamine in cancer: therapeutic and imaging implications. *Journal of Nuclear Medicine*, **2011**, 52, 1005-8	8.9	96
30	Haem oxygenase is synthetically lethal with the tumour suppressor fumarate hydratase. *Nature*, **2011**, 477, 225-8	50.4	367

29	Glutamine: pleiotropic roles in tumor growth and stress resistance. *Journal of Molecular Medicine*, **2011**, 89, 229-36	5.5	124
28	Isocitrate dehydrogenase 1/2 mutational analyses and 2-hydroxyglutarate measurements in Wilms tumors. *Pediatric Blood and Cancer*, **2011**, 56, 379-83	3	27
27	Measurement of glycine in the human brain in vivo by 1H-MRS at 3 T: application in brain tumors. *Magnetic Resonance in Medicine*, **2011**, 66, 609-18	4.4	39
26	Pyruvate carboxylase is required for glutamine-independent growth of tumor cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 8674-9	11.5	350
25	The distinct metabolic profile of hematopoietic stem cells reflects their location in a hypoxic niche. *Cell Stem Cell*, **2010**, 7, 380-90	18	729
24	Toll-like receptor-induced changes in glycolytic metabolism regulate dendritic cell activation. *Blood*, **2010**, 115, 4742-9	2.2	746
23	Wilms tumor in a child with L-2-hydroxyglutaric aciduria. *Pediatric and Developmental Pathology*, **2010**, 13, 408-11	2.2	20
22	Glioblastoma cells require glutamate dehydrogenase to survive impairments of glucose metabolism or Akt signaling. *Cancer Research*, **2009**, 69, 7986-93	10.1	313
21	Brick by brick: metabolism and tumor cell growth. *Current Opinion in Genetics and Development*, **2008**, 18, 54-61	4.9	769
20	The biology of cancer: metabolic reprogramming fuels cell growth and proliferation. *Cell Metabolism*, **2008**, 7, 11-20	24.6	2786
19	Myc regulates a transcriptional program that stimulates mitochondrial glutaminolysis and leads to glutamine addiction. *Proceedings of the National Academy of Sciences of the United States of America* , **2008**, 105, 18782-7	11.5	1379
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17	The transcription factor HIF-1alpha plays a critical role in the growth factor-dependent regulation of both aerobic and anaerobic glycolysis. *Genes and Development*, **2007**, 21, 1037-49	12.6	270
16	Systemic treatment with the antidiabetic drug metformin selectively impairs p53-deficient tumor cell growth. *Cancer Research*, **2007**, 67, 6745-52	10.1	746
15	Beyond aerobic glycolysis: transformed cells can engage in glutamine metabolism that exceeds the requirement for protein and nucleotide synthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 19345-50	11.5	1758
14	Phosphatidylinositol 3-kinase-dependent modulation of carnitine palmitoyltransferase 1A expression regulates lipid metabolism during hematopoietic cell growth. *Journal of Biological Chemistry*, **2006**, 281, 37372-80	5.4	175
13	Autophagy in metazoans: cell survival in the land of plenty. *Nature Reviews Molecular Cell Biology*, **2005**, 6, 439-48	48.7	646
12	The glucose dependence of Akt-transformed cells can be reversed by pharmacologic activation of fatty acid beta-oxidation. *Oncogene*, **2005**, 24, 4165-73	9.2	302

List of Publications

11	A mouse model of human L1 retrotransposition. *Nature Genetics*, **2002**, 32, 655-60	36.3	169
10	Determination of L1 retrotransposition kinetics in cultured cells. *Nucleic Acids Research*, **2000**, 28, 1418-23	20.1	218
9	Exon shuffling by L1 retrotransposition. *Science*, **1999**, 283, 1530-4	33.3	505
8	Analysis of the promoter from an expanding mouse retrotransposon subfamily. *Genomics*, **1999**, 56, 317-23	4.3	50
7	Full-length L1 elements have arisen recently in the same 1-kb region of the gorilla and human genomes. *Journal of Molecular Evolution*, **1998**, 47, 292-301	3.1	10
6	Rapid amplification of a retrotransposon subfamily is evolving the mouse genome. *Nature Genetics*, **1998**, 20, 288-90	36.3	126
5	Many human L1 elements are capable of retrotransposition. *Nature Genetics*, **1997**, 16, 37-43	36.3	384
4	High frequency retrotransposition in cultured mammalian cells. *Cell*, **1996**, 87, 917-27	56.2	808
3	Human enteric defensins. Gene structure and developmental expression. *Journal of Biological Chemistry*, **1996**, 271, 4038-45	5.4	221
2	Precision mapping of the mouse brain metabolome		1
1	Metabolic Diversity in Human Non-Small Cell Lung Cancer Cells		1