Henri Brunengraber

List of Publications by Year
in descending order

116 papers	5,289 citations	87888 38 h-index	102487 66 g-index
118 all docs	118 docs citations	118 times ranked	6200 citing authors

#	Article	IF	Citations
1	A roadmap for interpreting 13 C metabolite labeling patterns from cells. Current Opinion in Biotechnology, 2015, 34, 189-201.	6.6	513
2	Correction of13C Mass Isotopomer Distributions for Natural Stable Isotope Abundance. , 1996, 31, 255-262.		347
3	Treatment of cardiomyopathy and rhabdomyolysis in long-chain fat oxidation disorders using an anaplerotic odd-chain triglyceride. Journal of Clinical Investigation, 2002, 110, 259-269.	8.2	215
4	Assessing Cardiac Metabolism. Circulation Research, 2016, 118, 1659-1701.	4.5	211
5	Oncogenic PIK3CA mutations reprogram glutamine metabolism in colorectal cancer. Nature Communications, 2016, 7, 11971.	12.8	203
6	Fatty Acid and 3-Î²-Hydroxysterol Synthesis in the Perfused Rat Liver. Journal of Biological Chemistry, 1973, 248, 2656-2669.	3.4	200
7	Anaplerotic molecules: Current and future. Journal of Inherited Metabolic Disease, 2006, 29, 327-331.	3.6	170
8	Pyruvate carboxylase deficiency: clinical and biochemical response to anaplerotic diet therapy. Molecular Genetics and Metabolism, 2005, 84, 305-312.	1.1	127
9	Treatment of cardiomyopathy and rhabdomyolysis in long-chain fat oxidation disorders using an anaplerotic odd-chain triglyceride. Journal of Clinical Investigation, 2002, 110, 259-269.	8.2	117
10	Therapeutic ketosis with ketone ester delays central nervous system oxygen toxicity seizures in rats. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2013, 304, R829-R836.	1.8	101
11	Isotopomer Analysis of Citric Acid Cycle and Gluconeogenesis in Rat Liver. Journal of Biological Chemistry, 1995, 270, 10027-10036.	3.4	100
12	APPLICATIONS OF MASS ISOTOPOMER ANALYSISTO NUTRITION RESEARCH. Annual Review of Nutrition, 1997, 17, 559-596.	10.1	100
13	Assay of Low Deuterium Enrichment of Water by Isotopic Exchange with [U-13C3]Acetone and Gas Chromatographyâ€“Mass Spectrometry. Analytical Biochemistry, 1998, 258, 315-321.	2.4	99
14	Quantifying rates of protein synthesis in humans by use of2H2O: application to patients with end-stage renal disease. American Journal of Physiology - Endocrinology and Metabolism, 2004, 286, E665-E672.	3.5	81
15	Partitioning of pyruvate between oxidation and anaplerosis in swine hearts. American Journal of Physiology - Heart and Circulatory Physiology, 2000, 279, H2390-H2398.	3.2	80
16	Localization of the pre-squalene segment of the isoprenoid biosynthetic pathway in mammalian peroxisomes. Histochemistry and Cell Biology, 2007, 127, 273-290.	1.7	77
17	Limitations of the Mass Isotopomer Distribution Analysis of Glucose to Study Gluconeogenesis. Journal of Biological Chemistry, 1995, 270, 19806-19815.	3.4	72
18	Peroxisomal Fatty Acid Oxidation Is a Substantial Source of the Acetyl Moiety of Malonyl-CoA in Rat Heart. Journal of Biological Chemistry, 2004, 279, 19574-19579.	3.4	72

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19	Fatty acid synthesis by the liver perfused with deuterated and tritiated water. Biochemistry, 1973, 12, 2619-2624.	2.5	71
20	Anaplerotic treatment of long-chain fat oxidation disorders with triheptanoin: Review of 15years Experience. Molecular Genetics and Metabolism, 2015, 116, 260-268.	1.1	71
21	Glutamine Metabolism Regulates the Pluripotency Transcription Factor OCT4. Cell Reports, 2016, 16, 323-332.	6.4	70
22	Metabolism of S-3-hydroxybutyrate in the perfused rat liver. Archives of Biochemistry and Biophysics, 1987, 259, 149-156.	3.0	65
23	Interference of 3-hydroxyisobutyrate with measurements of ketone body concentration and isotopic enrichment by gas chromatography-mass spectrometry. Analytical Biochemistry, 1988, 173, 96-105.	2.4	64
24	Acute hibernation decreases myocardial pyruvate carboxylation and citrate release. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 281, H1613-H1620.	3.2	56
25	Catabolism of 4-Hydroxyacids and 4-Hydroxynonenal via 4-Hydroxy-4-phosphoacyl-CoAs. Journal of Biological Chemistry, 2009, 284, 33521-33534.	3.4	56
26	Parenteral and enteral metabolism of anaplerotic triheptanoin in normal rats. American Journal of Physiology - Endocrinology and Metabolism, 2006, 291, E860-E866.	3.5	55
27	Metabolomics, Pathway Regulation, and Pathway Discovery. Journal of Biological Chemistry, 2011, 286, 23631-23635.	3.4	53
28	Fatty Acid, 3-beta-Hydroxysterol, and Ketone Synthesis in the Perfused Rat Liver. Effects of (-)-Hydroxycitrate and Oleate. FEBS Journal, 1978, 82, 373-384.	0.2	52
29	Assay of the Deuterium Enrichment of Water via Acetylene. , 1996, 31, 639-642.		52
30	Assessing the Reversibility of the Anaplerotic Reactions of the Propionyl-CoA Pathway in Heart and Liver. Journal of Biological Chemistry, 2003, 278, 34959-34965.	3.4	49
31	Peroxisomal and Mitochondrial Oxidation of Fatty Acids in the Heart, Assessed from the 13C Labeling of Malonyl-CoA and the Acetyl Moiety of Citrate. Journal of Biological Chemistry, 2005, 280, 9265-9271.	3.4	48
32	Assay of the Concentration and 13C-Isotopic Enrichment of Malonylâ€“Coenzyme A by Gas Chromatographyâ€“Mass Spectrometry. Analytical Biochemistry, 2001, 298, 69-75.	2.4	47
33	Parenteral and enteral metabolism of anaplerotic triheptanoin in normal rats. II. Effects on lipolysis, glucose production, and liver acyl-CoA profile. American Journal of Physiology - Endocrinology and Metabolism, 2010, 298, E362-E371.	3.5	47
34	NEW SECONDARY METABOLITES OF PHENYLBUTYRATE IN HUMANS AND RATS. Drug Metabolism and Disposition, 2004, 32, 10-19.	3.3	45
35	Effect of (â^')-hydroxycitrate on ethanol metabolism. FEBS Letters, 1973, 36, 130-132.	2.8	44
36	Probing peroxisomal Î²-oxidation and the labelling of acetyl-CoA proxies with [1-13C]octanoate and [3-13C]octanoate in the perfused rat liver. Biochemical Journal, 2005, 389, 397-401.	3.7	42

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37	Interrelations between C4 Ketogenesis, C5 Ketogenesis, and Anaplerosis in the Perfused Rat Liver. Journal of Biological Chemistry, 2009, 284, 27799-27807.	3.4	42
38	Cholesterol in mouse retina originates primarily from in situ de novo biosynthesis. Journal of Lipid Research, 2016, 57, 258-264.	4.2	42
39	Tracing Hepatic Gluconeogenesis Relative to Citric Acid Cycle Activity in Vitro and in Vivo. Journal of Biological Chemistry, 1995, 270, 1509-1514.	3.4	41
40	Underestimation of metabolic rates owing to reincorporation of 14CO2 in the perfused rat liver. Biochemical Journal, 1982, 208, 231-234.	3.7	40
41	Assay of the concentration and stable isotope enrichment of short-chain fatty acids by gas chromatography/mass spectrometry. Journal of Mass Spectrometry, 1995, 30, 747-754.	1.6	40
42	Is There Glucose Production Outside of the Liver and Kidney?. Annual Review of Nutrition, 2009, 29, 43-57.	10.1	37
43	Colorectal cancers utilize glutamine as an anaplerotic substrate of the TCA cycle in vivo. Scientific Reports, 2019, 9, 19180.	3.3	37
44	Propionate-induced changes in cardiac metabolism, notably CoA trapping, are not altered by<scp>l</scp>-carnitine. American Journal of Physiology - Endocrinology and Metabolism, 2018, 315, E622-E633.	3.5	36
45	Regulation of Malonyl-CoA Concentration and Turnover in the Normal Heart. Journal of Biological Chemistry, 2004, 279, 34298-34301.	3.4	35
46	Metabolomic and Mass Isotopomer Analysis of Liver Gluconeogenesis and Citric Acid Cycle. Journal of Biological Chemistry, 2008, 283, 21978-21987.	3.4	35
47	Investigations by mass isotopomer analysis of the formation ofD-2-hydroxyglutarate by cultured lymphoblasts from two patients withD-2-hydroxyglutaric aciduria. FEBS Letters, 2004, 557, 115-120.	2.8	34
48	Serine and 1-carbon metabolism are required for HIF-mediated protection against retinopathy of prematurity. JCI Insight, 2019, 4, .	5.0	34
49	Inter-relations between 3-hydroxypropionate and propionate metabolism in rat liver: relevance to disorders of propionyl-CoA metabolism. American Journal of Physiology - Endocrinology and Metabolism, 2017, 313, E413-E428.	3.5	33
50	Potential of ketone body esters for parenteral and oral nutrition. Nutrition, 1997, 13, 233-235.	2.4	32
51	Glutamate, a Window on Liver Intermediary Metabolism. Journal of Nutrition, 2000, 130, 991S-994S.	2.9	32
52	Zonation of Labeling of Lipogenic Acetyl-CoA across the Liver. Journal of Biological Chemistry, 2004, 279, 43207-43216.	3.4	31
53	Dog model of therapeutic ketosis induced by oral administration of R,S-1,3-butanediol diacetoacetate. Journal of Nutritional Biochemistry, 2000, 11, 281-287.	4.2	30
54	Quantitative assessment of anaplerosis from propionate in pig heart in vivo. American Journal of Physiology - Endocrinology and Metabolism, 2003, 284, E351-E356.	3.5	30

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55	Dynamics of glutathione and ophthalmate traced with²H-enriched body water in rats and humans. American Journal of Physiology - Endocrinology and Metabolism, 2009, 297, E260-E269.	3.5	29
56	Metabolomic assays of the concentration and mass isotopomer distribution of gluconeogenic and citric acid cycle intermediates. Metabolomics, 2006, 2, 85-94.	3.0	28
57	Zonation of acetate labeling across the liver: implications for studies of lipogenesis by MIDA. American Journal of Physiology - Endocrinology and Metabolism, 1999, 277, E1022-E1027.	3.5	27
58	Using Isotopic Tools to Dissect and Quantitate Parallel Metabolic Pathways. Journal of the American Chemical Society, 2010, 132, 6309-6311.	13.7	27
59	Methods for measuring gluconeogenesis in vivo. Current Opinion in Clinical Nutrition and Metabolic Care, 1998, 1, 461-465.	2.5	27
60	Probing the link between citrate and malonyl-CoA in perfused rat hearts. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 283, H1379-H1386.	3.2	26
61	Assay of the Concentration and 13C Isotopic Enrichment of Propionyl-CoA, Methylmalonyl-CoA, and Succinyl-CoA by Gas Chromatographyâ€“Mass Spectrometry. Analytical Biochemistry, 2002, 305, 90-96.	2.4	26
62	[36] Hydroxycitrate. Methods in Enzymology, 1981, 72, 486-497.	1.0	25
63	[12] Shunt pathway of mevalonate metabolism. Methods in Enzymology, 1985, 110, 100-114.	1.0	25
64	Identification of phenylbutyrylglutamine, a new metabolite of phenylbutyrate metabolism in humans. Journal of Mass Spectrometry, 2002, 37, 581-590.	1.6	25
65	Limitations of the Mass Isotopomer Distribution Analysis of Glucose to Study Gluconeogenesis. Journal of Biological Chemistry, 1998, 273, 16853-16859.	3.4	24
66	Metabolomic and Mass Isotopomer Analysis of Liver Gluconeogenesis and Citric Acid Cycle. Journal of Biological Chemistry, 2008, 283, 21988-21996.	3.4	24
67	R,S-1,3-butanediol acetoacetate esters, potential alternates to lipid emulsions for total parenteral nutrition. Journal of Nutritional Biochemistry, 1995, 6, 111-118.	4.2	23
68	Mass isotopomer study of anaplerosis from propionate in the perfused rat heart. Archives of Biochemistry and Biophysics, 2007, 463, 110-117.	3.0	22
69	Multiple Mass Isotopomer Tracing of Acetyl-CoA Metabolism in Langendorff-perfused Rat Hearts. Journal of Biological Chemistry, 2015, 290, 8121-8132.	3.4	22
70	Stable Isotope Model for Assessing Production of Short Chain Fatty Acids from Colon-Derived Sugar: Application in Pigs. Journal of Nutrition, 1996, 126, 3069-3076.	2.9	20
71	Determination of (13C)urea enrichment by gas chromatography/mass spectrometry and gas chromatography/isotope ratio mass spectrometry. Biological Mass Spectrometry, 1994, 23, 510-513.	0.5	19
72	Limitations in estimating gluconeogenesis and Cori cycling from mass isotopomer distributions using [U-13C6]glucose. American Journal of Physiology - Endocrinology and Metabolism, 1998, 274, E954-E961.	3.5	19

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73	Metabolism of Levulinate in Perfused Rat Livers and Live Rats. Journal of Biological Chemistry, 2011, 286, 5895-5904.	3.4	19
74	Compartmentation of Metabolism of the C12-, C9-, and C5-n-dicarboxylates in Rat Liver, Investigated by Mass Isotopomer Analysis. Journal of Biological Chemistry, 2015, 290, 18671-18677.	3.4	19
75	In Vitro Modeling of Fatty Acid Synthesis under Conditions Simulating the Zonation of Lipogenic [13C]Acetyl-CoA Enrichment in the Liver. Journal of Biological Chemistry, 2004, 279, 43217-43226.	3.4	18
76	Differential effects of heptanoate and hexanoate on myocardial citric acid cycle intermediates following ischemia-reperfusion. Journal of Applied Physiology, 2006, 100, 76-82.	2.5	18
77	Microcarrier culture: Applications in biological production and cell biology. Biotechnology and Bioengineering, 1981, 23, 2673-2689.	3.3	17
78	Analysis of the Citric Acid Cycle Intermediates Using Gas Chromatography-Mass Spectrometry. Methods in Molecular Biology, 2011, 708, 147-157.	0.9	17
79	Tracing Gluconeogenesis with Deuterated Water: Measurement of Low Deuterium Enrichments on Carbons 6 and 2 of Glucose. Analytical Biochemistry, 1997, 248, 158-167.	2.4	16
80	Post-ischemic treatment with dipyruvyl-acetyl-glycerol decreases myocardial infarct size in the pig. Cardiovascular Drugs and Therapy, 2003, 17, 209-216.	2.6	16
81	Metabolism of Î³-hydroxybutyrate in perfused rat livers. Biochemical Journal, 2012, 444, 333-341.	3.7	15
82	Association of Uremic Solutes With Cardiovascular Death in Diabetic Kidney Disease. American Journal of Kidney Diseases, 2022, 80, 502-512.e1.	1.9	15
83	Integrative physiology of splanchnic glutamine and ammonium metabolism. American Journal of Physiology - Endocrinology and Metabolism, 2000, 278, E469-E476.	3.5	14
84	Ex-Vivo Normothermic Limb Perfusion With a Hemoglobin-Based Oxygen Carrier Perfusate. Military Medicine, 2020, 185, 110-120.	0.8	13
85	Delineation of substrate selection and anaplerosis in tricarboxylic acid cycle of the heart by ¹³C NMR spectroscopy and mass spectrometry. NMR in Biomedicine, 2011, 24, 176-187.	2.8	11
86	Glutathione species and metabolomic prints in subjects with liver disease as biological markers for the detection of hepatocellular carcinoma. Hpb, 2016, 18, 979-990.	0.3	11
87	Assessment of the flux of mitochondrial acetyl-CoA in liver and kidney by using the differential production of 14CO2 from tracers of (1-14C)- and (2-14C)-labelled 4-methyl-2-oxovalerate. Biochemical Journal, 1983, 210, 265-268.	3.7	10
88	Competition between acetate and oleate for the formation of malonyl-CoA and mitochondrial acetyl-CoA in the perfused rat heart. Journal of Molecular and Cellular Cardiology, 2006, 41, 868-875.	1.9	9
89	Metabolomics and Mass Isotopomer Analysis as a Strategy for Pathway Discovery: Pyrrolyl and Cyclopentenyl Derivatives of the Pro-Drug of Abuse, Levulinate. Chemical Research in Toxicology, 2013, 26, 213-220.	3.3	9
90	Lipogenesis from ketone bodies in the perfused rat liver: effects of acetate and ethanol. Biochemistry and Cell Biology, 1987, 65, 989-996.	2.0	8

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91	Biosynthesis and characterization of 3-hydroxyalkan-2-ones and 2,3-alkanediols: Potential products of aldehyde metabolism. Biological Mass Spectrometry, 1992, 21, 242-248.	0.5	8
92	Dipropionylcysteine Ethyl Ester Compensates for Loss of Citric Acid Cycle Intermediates During Post Ischemia Reperfusion in the Pig Heart. Cardiovascular Drugs and Therapy, 2009, 23, 459-469.	2.6	8
93	Ultrastructure and Intercellular Vacuolization of Isolated Perfused and Control Rat Testes. Journal of Andrology, 1983, 4, 361-370.	2.0	7
94	15N enrichment of ammonium, glutamine-amide and urea, measured via mass isotopomer analysis of hexamethylenetetramine. , 1999, 34, 1130-1136.		7
95	Effect of (â˜)-hydroxycitrate on ketone production by the perfused liver. FEBS Letters, 1976, 65, 251-253.	2.8	6
96	One-stage hepatectomy in the dog. Journal of Surgical Research, 1990, 48, 33-37.	1.6	6
97	Assay of the13C and2H Mass Isotopomer Distribution of Phosphoenolpyruvate by Gas Chromatography/Mass Spectrometry. , 1996, 31, 643-648.		6
98	Composite Vascularized Allograft Machine Preservation: State of the Art. Current Transplantation Reports, 2019, 6, 265-276.	2.0	6
99	Assay of the activity of malonylâ€“coenzyme A decarboxylase by gas chromatographyâ€“mass spectrometry. Analytical Biochemistry, 2007, 363, 169-174.	2.4	5
100	What is the proper precursor-to-product labeling relationship for calculating the fractional synthetic rate of muscle triglyceride ?. Journal of Lipid Research, 2012, 53, 1-3.	4.2	5
101	Metabolic Profiling of Skeletal Muscle During Ex-Vivo Normothermic Limb Perfusion. Military Medicine, 2021, 186, 358-363.	0.8	4
102	Effects of hydroxyurea and benzo(a)pyrene on DNA synthesis in the isolated perfused rat lung. Bulletin of Environmental Contamination and Toxicology, 1982, 28, 135-140.	2.7	3
103	Quantitation of 1,3-butanediol and its acidic metabolites by gas chromatography-mass spectrometry. Analytical Biochemistry, 1990, 186, 101-107.	2.4	3
104	An improved procedure for the synthesis of labelled fatty acids utilizing diethyl malonate. Journal of Labelled Compounds and Radiopharmaceuticals, 2006, 49, 171-176.	1.0	2
105	Overcompensation of CoA Trapping by Di(2-ethylhexyl) Phthalate (DEHP) Metabolites in Livers of Wistar Rats. International Journal of Molecular Sciences, 2021, 22, 13489.	4.1	2
106	New mechanisms by which statins lower plasma cholesterol. Journal of Lipid Research, 2016, 57, 1325-1326.	4.2	1
107	Acetylâ€CoA generated in peroxisomes of CHO and HepG2 cells is preferentially incorporated into sterols versus fatty acids: studies with [Uâ€13C12]dodecanedioate. FASEB Journal, 2006, 20, A1467.	0.5	1
108	Anaplerosis from heptanoate â€a propionylâ€CoA precursorâ€•in mouse brain. FASEB Journal, 2007, 21, A340.	0.5	1

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109	Assay of the concentration and 13Câ€isotopic enrichment of gluconeogenic and citric acid cycle intermediates by gas chromatographyâ€mass spectrometry. FASEB Journal, 2006, 20, A1466.	0.5	0
110	Measurements of the kinetics of the pentose phosphate pathway (PPP) in perfused hearts and livers, using [Uâ€13C6]gluconolactone. FASEB Journal, 2007, 21, A836.	0.5	0
111	Partial betaâ€oxidation of gammaâ€hydroxybutyrate (GHB) in perfused rat livers. FASEB Journal, 2007, 21, A664.	0.5	0
112	Interference of ethanol with the metabolism of gammaâ€hydroxybutyrate (GHB) in the perfused rat liver. FASEB Journal, 2007, 21, A664.	0.5	0
113	Interrelations between C 4 â€ketogenesis and C 5 â€ketogenesis in the perfused rat liver. FASEB Journal, 2009, 23, .	0.5	0
114	Cyclical C7â€CoA esters derived from calcium levulinate, a proâ€drug of abuse. FASEB Journal, 2012, 26, 551.1.	0.5	0
115	Metabolic fate of lactate after anoxia at 20Â°C in the Western painted turtle. FASEB Journal, 2013, 27, 714.14.	0.5	0
116	Hepatic Metabolism of 3â€Hydroxypropionate a Byproduct in Propionic Acidemia. FASEB Journal, 2015, 29, .	0.5	0