

Gary D Lopaschuk

List of Publications by Citations

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247
papers

21,741
citations

72
h-index

142
g-index

263
ext. papers

24,656
ext. citations

7.5
avg, IF

7.04
L-index

#	Paper	IF	Citations
247	Mitochondrial overload and incomplete fatty acid oxidation contribute to skeletal muscle insulin resistance. <i>Cell Metabolism</i> , 2008 , 7, 45-56	24.6	1378
246	Myocardial substrate metabolism in the normal and failing heart. <i>Physiological Reviews</i> , 2005 , 85, 1093-1299	47.9	1354
245	Myocardial fatty acid metabolism in health and disease. <i>Physiological Reviews</i> , 2010 , 90, 207-58	47.9	1285
244	A mitochondria-K ⁺ channel axis is suppressed in cancer and its normalization promotes apoptosis and inhibits cancer growth. <i>Cancer Cell</i> , 2007 , 11, 37-51	24.3	1199
243	The cardiac phenotype induced by PPAR β overexpression mimics that caused by diabetes mellitus. <i>Journal of Clinical Investigation</i> , 2002 , 109, 121-130	15.9	649
242	The antianginal drug trimetazidine shifts cardiac energy metabolism from fatty acid oxidation to glucose oxidation by inhibiting mitochondrial long-chain 3-ketoacyl coenzyme A thiolase. <i>Circulation Research</i> , 2000 , 86, 580-8	15.7	573
241	Cardiovascular remodelling in coronary artery disease and heart failure. <i>Lancet, The</i> , 2014 , 383, 1933-43	40	469
240	High rates of fatty acid oxidation during reperfusion of ischemic hearts are associated with a decrease in malonyl-CoA levels due to an increase in 5RAMP-activated protein kinase inhibition of acetyl-CoA carboxylase. <i>Journal of Biological Chemistry</i> , 1995 , 270, 17513-20	5.4	469
239	Regulation of fatty acid oxidation in the mammalian heart in health and disease. <i>Lipids and Lipid Metabolism</i> , 1994 , 1213, 263-76		415
238	The cardiac phenotype induced by PPAR α overexpression mimics that caused by diabetes mellitus. <i>Journal of Clinical Investigation</i> , 2002 , 109, 121-30	15.9	364
237	Energy metabolic phenotype of the cardiomyocyte during development, differentiation, and postnatal maturation. <i>Journal of Cardiovascular Pharmacology</i> , 2010 , 56, 130-40	3.1	363
236	AMPK alterations in cardiac physiology and pathology: enemy or ally?. <i>Journal of Physiology</i> , 2006 , 574, 95-112	3.9	289
235	Inhibition of de novo ceramide synthesis reverses diet-induced insulin resistance and enhances whole-body oxygen consumption. <i>Diabetes</i> , 2010 , 59, 2453-64	0.9	263
234	Impaired myocardial fatty acid oxidation and reduced protein expression of retinoid X receptor- α in pacing-induced heart failure. <i>Circulation</i> , 2002 , 106, 606-12	16.7	260
233	Targeting fatty acid and carbohydrate oxidation--a novel therapeutic intervention in the ischemic and failing heart. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2011 , 1813, 1333-50	4.9	239
232	The inhibition of pyruvate dehydrogenase kinase improves impaired cardiac function and electrical remodeling in two models of right ventricular hypertrophy: resuscitating the hibernating right ventricle. <i>Journal of Molecular Medicine</i> , 2010 , 88, 47-60	5.5	236
231	Pathways and control of ketone body metabolism: on the fringe of lipid biochemistry. <i>Prostaglandins Leukotrienes and Essential Fatty Acids</i> , 2004 , 70, 243-51	2.8	224

230	Ranolazine stimulates glucose oxidation in normoxic, ischemic, and reperfused ischemic rat hearts. <i>Circulation</i> , 1996 , 93, 135-42	16.7	216
229	A role for peroxisome proliferator-activated receptor alpha (PPARalpha) in the control of cardiac malonyl-CoA levels: reduced fatty acid oxidation rates and increased glucose oxidation rates in the hearts of mice lacking PPARalpha are associated with higher concentrations of malonyl-CoA and	5.4	205
228	Characterization of 5AMP-activated protein kinase activity in the heart and its role in inhibiting acetyl-CoA carboxylase during reperfusion following ischemia. <i>Lipids and Lipid Metabolism</i> , 1996 , 1301, 67-75		204
227	High levels of fatty acids delay the recovery of intracellular pH and cardiac efficiency in post-ischemic hearts by inhibiting glucose oxidation. <i>Journal of the American College of Cardiology</i> , 2002 , 39, 718-25	15.1	199
226	Cardiac energy metabolism in obesity. <i>Circulation Research</i> , 2007 , 101, 335-47	15.7	197
225	The role of nitric oxide in cardiac depression induced by interleukin-1 beta and tumour necrosis factor-alpha. <i>British Journal of Pharmacology</i> , 1995 , 114, 27-34	8.6	176
224	Leptin activates hypothalamic acetyl-CoA carboxylase to inhibit food intake. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007 , 104, 17358-63	11.5	172
223	Malonyl coenzyme a decarboxylase inhibition protects the ischemic heart by inhibiting fatty acid oxidation and stimulating glucose oxidation. <i>Circulation Research</i> , 2004 , 94, e78-84	15.7	165
222	Empagliflozin Increases Cardiac Energy Production In Diabetes: Novel Translational Insights Into the Heart Failure Benefits of SGLT2 Inhibitors. <i>JACC Basic To Translational Science</i> , 2018 , 3, 575-587	8.7	162
221	Cardiac efficiency is improved after ischemia by altering both the source and fate of protons. <i>Circulation Research</i> , 1996 , 79, 940-8	15.7	156
220	Role of fatty acid uptake and fatty acid beta-oxidation in mediating insulin resistance in heart and skeletal muscle. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2010 , 1801, 1-22	5	154
219	Fatty acid oxidation and malonyl-CoA decarboxylase in the vascular remodeling of pulmonary hypertension. <i>Science Translational Medicine</i> , 2010 , 2, 44ra58	17.5	149
218	Beneficial effects of trimetazidine in ex vivo working ischemic hearts are due to a stimulation of glucose oxidation secondary to inhibition of long-chain 3-ketoacyl coenzyme a thiolase. <i>Circulation Research</i> , 2003 , 93, e33-7	15.7	144
217	Increased glucose uptake and oxidation in mouse hearts prevent high fatty acid oxidation but cause cardiac dysfunction in diet-induced obesity. <i>Circulation</i> , 2009 , 119, 2818-28	16.7	143
216	Cardiac insulin-resistance and decreased mitochondrial energy production precede the development of systolic heart failure after pressure-overload hypertrophy. <i>Circulation: Heart Failure</i> , 2013 , 6, 1039-48	7.6	142
215	Assessing Cardiac Metabolism: A Scientific Statement From the American Heart Association. <i>Circulation Research</i> , 2016 , 118, 1659-701	15.7	142
214	Loss of Metabolic Flexibility in the Failing Heart. <i>Frontiers in Cardiovascular Medicine</i> , 2018 , 5, 68	5.4	139
213	ACE2 Deficiency Worsens Epicardial Adipose Tissue Inflammation and Cardiac Dysfunction in Response to Diet-Induced Obesity. <i>Diabetes</i> , 2016 , 65, 85-95	0.9	138

212	Mechanisms of Cardiovascular Benefits of Sodium Glucose Co-Transporter 2 (SGLT2) Inhibitors: A State-of-the-Art Review. <i>JACC Basic To Translational Science</i> , 2020 , 5, 632-644	8.7	136
211	Metabolic abnormalities in the diabetic heart. <i>Heart Failure Reviews</i> , 2002 , 7, 149-59	5	135
210	Leptin activates cardiac fatty acid oxidation independent of changes in the AMP-activated protein kinase-acetyl-CoA carboxylase-malonyl-CoA axis. <i>Journal of Biological Chemistry</i> , 2002 , 277, 29424-30	5.4	135
209	Angiotensin 1-7 ameliorates diabetic cardiomyopathy and diastolic dysfunction in db/db mice by reducing lipotoxicity and inflammation. <i>Circulation: Heart Failure</i> , 2014 , 7, 327-39	7.6	134
208	Stimulation of glucose oxidation protects against acute myocardial infarction and reperfusion injury. <i>Cardiovascular Research</i> , 2012 , 94, 359-69	9.9	133
207	Obesity-induced lysine acetylation increases cardiac fatty acid oxidation and impairs insulin signalling. <i>Cardiovascular Research</i> , 2014 , 103, 485-97	9.9	132
206	Energy metabolism in the hypertrophied heart. <i>Heart Failure Reviews</i> , 2002 , 7, 161-73	5	132
205	AMP-activated protein kinase (AMPK) control of fatty acid and glucose metabolism in the ischemic heart. <i>Progress in Lipid Research</i> , 2003 , 42, 238-56	14.3	132
204	Phosphorylation control of cardiac acetyl-CoA carboxylase by cAMP-dependent protein kinase and 5RAMP activated protein kinase. <i>FEBS Journal</i> , 1999 , 262, 184-90		125
203	Gut microbiota metabolism of L-carnitine and cardiovascular risk. <i>Atherosclerosis</i> , 2013 , 231, 456-61	3.1	124
202	Type 1 diabetic cardiomyopathy in the Akita (Ins2WT/C96Y) mouse model is characterized by lipotoxicity and diastolic dysfunction with preserved systolic function. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2009 , 297, H2096-108	5.2	124
201	Absence of malonyl coenzyme A decarboxylase in mice increases cardiac glucose oxidation and protects the heart from ischemic injury. <i>Circulation</i> , 2006 , 114, 1721-8	16.7	118
200	Insulin inhibition of 5Radenosine monophosphate-activated protein kinase in the heart results in activation of acetyl coenzyme A carboxylase and inhibition of fatty acid oxidation. <i>Metabolism: Clinical and Experimental</i> , 1997 , 46, 1270-4	12.7	116
199	Fatty acid translocase/CD36 deficiency does not energetically or functionally compromise hearts before or after ischemia. <i>Circulation</i> , 2004 , 109, 1550-7	16.7	113
198	Cellular cross-talk between epicardial adipose tissue and myocardium in relation to the pathogenesis of cardiovascular disease. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2012 , 303, E937-49	6	112
197	Glucose metabolism in the ischemic heart. <i>Circulation</i> , 1997 , 95, 313-5	16.7	108
196	ANG II causes insulin resistance and induces cardiac metabolic switch and inefficiency: a critical role of PDK4. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2013 , 304, H1103-13	5.2	106
195	Insulin-stimulated cardiac glucose oxidation is increased in high-fat diet-induced obese mice lacking malonyl CoA decarboxylase. <i>Diabetes</i> , 2009 , 58, 1766-75	0.9	104

194	Agonist-induced hypertrophy and diastolic dysfunction are associated with selective reduction in glucose oxidation: a metabolic contribution to heart failure with normal ejection fraction. <i>Circulation: Heart Failure</i> , 2012 , 5, 493-503	7.6	104
193	Glucose oxidation rates in fatty acid-perfused isolated working hearts from diabetic rats. <i>Lipids and Lipid Metabolism</i> , 1989 , 1006, 97-103		101
192	Upregulation of 5SRAMP-activated protein kinase is responsible for the increase in myocardial fatty acid oxidation rates following birth in the newborn rabbit. <i>Circulation Research</i> , 1997 , 80, 482-9	15.7	97
191	Chronic activation of PPARalpha is detrimental to cardiac recovery after ischemia. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2006 , 290, H87-95	5.2	91
190	Targeting mitochondrial oxidative metabolism as an approach to treat heart failure. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 2013 , 1833, 857-65	4.9	89
189	Cardiac diacylglycerol accumulation in high fat-fed mice is associated with impaired insulin-stimulated glucose oxidation. <i>Cardiovascular Research</i> , 2011 , 89, 148-56	9.9	89
188	Inhibition of carnitine palmitoyltransferase-1 activity alleviates insulin resistance in diet-induced obese mice. <i>Diabetes</i> , 2013 , 62, 711-20	0.9	88
187	Empagliflozin [®] Fuel Hypothesis: Not so Soon. <i>Cell Metabolism</i> , 2016 , 24, 200-2	24.6	87
186	Metabolic Modulators in Heart Disease: Past, Present, and Future. <i>Canadian Journal of Cardiology</i> , 2017 , 33, 838-849	3.8	86
185	Therapeutic effects of adropin on glucose tolerance and substrate utilization in diet-induced obese mice with insulin resistance. <i>Molecular Metabolism</i> , 2015 , 4, 310-24	8.8	85
184	Pressure-overload-induced heart failure induces a selective reduction in glucose oxidation at physiological afterload. <i>Cardiovascular Research</i> , 2013 , 97, 676-85	9.9	85
183	Long-term effects of intrauterine growth restriction on cardiac metabolism and susceptibility to ischaemia/reperfusion. <i>Cardiovascular Research</i> , 2011 , 90, 285-94	9.9	84
182	The effect of alloxan- and streptozotocin-induced diabetes on calcium transport in rat cardiac sarcoplasmic reticulum. The possible involvement of long chain acylcarnitines. <i>Canadian Journal of Physiology and Pharmacology</i> , 1983 , 61, 439-48	2.4	83
181	Chronic inhibition of pyruvate dehydrogenase in heart triggers an adaptive metabolic response. <i>Journal of Biological Chemistry</i> , 2011 , 286, 11155-62	5.4	81
180	Potential mechanisms and consequences of cardiac triacylglycerol accumulation in insulin-resistant rats. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2003 , 284, E923-30	6	81
179	Myocardial ischemia differentially regulates LKB1 and an alternate 5SRAMP-activated protein kinase. <i>Journal of Biological Chemistry</i> , 2005 , 280, 183-90	5.4	81
178	Glucose and fatty acid metabolism in the isolated working mouse heart. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 1999 , 277, R1210-7	3.2	78
177	Maturation of fatty acid and carbohydrate metabolism in the newborn heart. <i>Molecular and Cellular Biochemistry</i> , 1998 , 188, 49-56	4.2	76

176	The 1993 Merck Frosst Award. Acetyl-CoA carboxylase: an important regulator of fatty acid oxidation in the heart. <i>Canadian Journal of Physiology and Pharmacology</i> , 1994 , 72, 1101-9	2.4	72
175	Malonyl CoA control of fatty acid oxidation in the ischemic heart. <i>Journal of Molecular and Cellular Cardiology</i> , 2002 , 34, 1099-109	5.8	71
174	The malonyl CoA axis as a potential target for treating ischaemic heart disease. <i>Cardiovascular Research</i> , 2008 , 79, 259-68	9.9	70
173	Complex Energy Metabolic Changes in Heart Failure With Preserved Ejection Fraction and Heart Failure With Reduced Ejection Fraction. <i>Canadian Journal of Cardiology</i> , 2017 , 33, 860-871	3.8	69
172	Increased ketone body oxidation provides additional energy for the failing heart without improving cardiac efficiency. <i>Cardiovascular Research</i> , 2019 , 115, 1606-1616	9.9	69
171	Alterations in energy metabolism in cardiomyopathies. <i>Annals of Medicine</i> , 2007 , 39, 594-607	1.5	69
170	Contribution of malonyl-CoA decarboxylase to the high fatty acid oxidation rates seen in the diabetic heart. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2000 , 278, H1196-204	5.2	69
169	Regulation of carbohydrate metabolism in ischemia and reperfusion. <i>American Heart Journal</i> , 2000 , 139, S115-9	4.9	69
168	Failing mouse hearts utilize energy inefficiently and benefit from improved coupling of glycolysis and glucose oxidation. <i>Cardiovascular Research</i> , 2014 , 101, 30-8	9.9	68
167	Cardiac Energy Metabolism in Heart Failure. <i>Circulation Research</i> , 2021 , 128, 1487-1513	15.7	68
166	Important roles of brain-specific carnitine palmitoyltransferase and ceramide metabolism in leptin hypothalamic control of feeding. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011 , 108, 9691-6	11.5	67
165	Alterations in fatty acid oxidation during reperfusion of the heart after myocardial ischemia. <i>American Journal of Cardiology</i> , 1997 , 80, 11A-16A	3	66
164	Triacylglycerol turnover in isolated working hearts of acutely diabetic rats. <i>Canadian Journal of Physiology and Pharmacology</i> , 1994 , 72, 1110-9	2.4	66
163	Characterization of cardiac malonyl-CoA decarboxylase and its putative role in regulating fatty acid oxidation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 1998 , 275, H2122-9	5.2	65
162	Myocardial Energy Substrate Metabolism in Heart Failure : from Pathways to Therapeutic Targets. <i>Current Pharmaceutical Design</i> , 2015 , 21, 3654-64	3.3	64
161	Fatty acids attenuate insulin regulation of 5RAMP-activated protein kinase and insulin cardioprotection after ischemia. <i>Circulation Research</i> , 2006 , 99, 61-8	15.7	63
160	Abnormal mechanical function in diabetes: relationship to altered myocardial carbohydrate/lipid metabolism. <i>Coronary Artery Disease</i> , 1996 , 7, 116-23	1.4	63
159	Propionyl L-carnitine improvement of hypertrophied heart function is accompanied by an increase in carbohydrate oxidation. <i>Circulation Research</i> , 1995 , 77, 726-34	15.7	62

158	Role of malonyl-CoA in heart disease and the hypothalamic control of obesity. <i>Cardiovascular Research</i> , 2007 , 73, 278-87	9.9	61
157	Dichloroacetate improves postischemic function of hypertrophied rat hearts. <i>Journal of the American College of Cardiology</i> , 2000 , 36, 1378-85	15.1	61
156	Evolving Concepts of Myocardial Energy Metabolism: More Than Just Fats and Carbohydrates. <i>Circulation Research</i> , 2016 , 119, 1173-1176	15.7	60
155	Regulation of substrate oxidation preferences in muscle by the peptide hormone adropin. <i>Diabetes</i> , 2014 , 63, 3242-52	0.9	59
154	Nrg4 promotes fuel oxidation and a healthy adipokine profile to ameliorate diet-induced metabolic disorders. <i>Molecular Metabolism</i> , 2017 , 6, 863-872	8.8	59
153	beta-Hydroxybutyrate inhibits myocardial fatty acid oxidation in vivo independent of changes in malonyl-CoA content. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2003 , 285, H1628-31	5.3	59
152	Inhibition of glycolysis and enhanced mechanical function of working rat hearts as a result of adenosine A1 receptor stimulation during reperfusion following ischaemia. <i>British Journal of Pharmacology</i> , 1996 , 118, 355-63	8.6	58
151	Malonyl-CoA decarboxylase inhibition suppresses fatty acid oxidation and reduces lactate production during demand-induced ischemia. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005 , 289, H2304-9	5.2	56
150	Characterization of rat liver malonyl-CoA decarboxylase and the study of its role in regulating fatty acid metabolism. <i>Biochemical Journal</i> , 2000 , 350, 599-608	3.8	56
149	Acetylation control of cardiac fatty acid oxidation and energy metabolism in obesity, diabetes, and heart failure. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2016 , 1862, 2211-2220	6.9	56
148	Pyridine nucleotide regulation of cardiac intermediary metabolism. <i>Circulation Research</i> , 2012 , 111, 628-41.7	4.7	55
147	Cardiac fatty acid oxidation in heart failure associated with obesity and diabetes. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2016 , 1861, 1525-34	5	54
146	Metabolic Modulation. <i>Circulation</i> , 2002 , 105, 140-142	16.7	54
145	Rationale and benefits of trimetazidine by acting on cardiac metabolism in heart failure. <i>International Journal of Cardiology</i> , 2016 , 203, 909-15	3.2	53
144	Diastolic dysfunction in familial hypertrophic cardiomyopathy transgenic model mice. <i>Cardiovascular Research</i> , 2009 , 82, 84-92	9.9	52
143	Targeting the glucagon receptor improves cardiac function and enhances insulin sensitivity following a myocardial infarction. <i>Cardiovascular Diabetology</i> , 2019 , 18, 1	8.7	52
142	The isolated working mouse heart: methodological considerations. <i>Pflugers Archiv European Journal of Physiology</i> , 1999 , 437, 979-85	4.6	51
141	Role of CoA and acetyl-CoA in regulating cardiac fatty acid and glucose oxidation. <i>Biochemical Society Transactions</i> , 2014 , 42, 1043-51	5.1	50

140	Targeting intermediary metabolism in the hypothalamus as a mechanism to regulate appetite. <i>Pharmacological Reviews</i> , 2010 , 62, 237-64	22.5	50
139	Glucose oxidation is stimulated in reperfused ischemic hearts with the carnitine palmitoyltransferase 1 inhibitor, Etomoxir. <i>Molecular and Cellular Biochemistry</i> , 1989 , 88, 175-9	4.2	50
138	Acetylation and succinylation contribute to maturational alterations in energy metabolism in the newborn heart. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2016 , 311, H347-63	5.2	50
137	Increased cardiac fatty acid uptake with dobutamine infusion in swine is accompanied by a decrease in malonyl CoA levels. <i>Cardiovascular Research</i> , 1996 , 32, 879-885	9.9	49
136	Measurements of fatty acid and carbohydrate metabolism in the isolated working rat heart 1997 , 172, 137-147		49
135	Effect of fatty acids on human bone marrow mesenchymal stem cell energy metabolism and survival. <i>PLoS ONE</i> , 2015 , 10, e0120257	3.7	49
134	Lowering body weight in obese mice with diastolic heart failure improves cardiac insulin sensitivity and function: implications for the obesity paradox. <i>Diabetes</i> , 2015 , 64, 1643-57	0.9	47
133	Targeting malonyl CoA inhibition of mitochondrial fatty acid uptake as an approach to treat cardiac ischemia/reperfusion. <i>Basic Research in Cardiology</i> , 2009 , 104, 203-10	11.8	46
132	Glucose utilization and glycogen turnover are accelerated in hypertrophied rat hearts during severe low-flow ischemia. <i>Journal of Molecular and Cellular Cardiology</i> , 1999 , 31, 493-502	5.8	46
131	Glycolysis and glucose oxidation during reperfusion of ischemic hearts from diabetic rats. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 1994 , 1225, 191-9	6.9	45
130	Uncoupling of glycolysis from glucose oxidation accompanies the development of heart failure with preserved ejection fraction. <i>Molecular Medicine</i> , 2018 , 24, 3	6.2	44
129	Impaired branched chain amino acid oxidation contributes to cardiac insulin resistance in heart failure. <i>Cardiovascular Diabetology</i> , 2019 , 18, 86	8.7	43
128	Alteration of glycogen and glucose metabolism in ischaemic and post-ischaemic working rat hearts by adenosine A1 receptor stimulation. <i>British Journal of Pharmacology</i> , 1999 , 128, 197-205	8.6	43
127	Volume overload hypertrophy of the newborn heart slows the maturation of enzymes involved in the regulation of fatty acid metabolism. <i>Journal of the American College of Cardiology</i> , 1999 , 33, 1724-34 ^{15.1}		43
126	Malonyl-CoA decarboxylase (MCD) is differentially regulated in subcellular compartments by 5AMP-activated protein kinase (AMPK). Studies using H9c2 cells overexpressing MCD and AMPK by adenoviral gene transfer technique. <i>FEBS Journal</i> , 2004 , 271, 2831-40		41
125	Cardiac energy metabolic alterations in pressure overload-induced left and right heart failure (2013 Grover Conference Series). <i>Pulmonary Circulation</i> , 2015 , 5, 15-28	2.7	39
124	Impact of the renin-angiotensin system on cardiac energy metabolism in heart failure. <i>Journal of Molecular and Cellular Cardiology</i> , 2013 , 63, 98-106	5.8	39
123	gAd-globular head domain of adiponectin increases fatty acid oxidation in newborn rabbit hearts. <i>Journal of Biological Chemistry</i> , 2004 , 279, 44320-6	5.4	39

122	Discovery of potent and orally available malonyl-CoA decarboxylase inhibitors as cardioprotective agents. <i>Journal of Medicinal Chemistry</i> , 2006 , 49, 4055-8	8.3	38
121	Hypothalamic malonyl-CoA and the control of food intake. <i>Physiology and Behavior</i> , 2013 , 122, 17-24	3.5	37
120	Accelerated rates of glycolysis in the hypertrophied heart: are they a methodological artifact?. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2002 , 282, E1039-45	6	36
119	Inhibition of the Unfolded Protein Response Mechanism Prevents Cardiac Fibrosis. <i>PLoS ONE</i> , 2016 , 11, e0159682	3.7	36
118	Statins Reduce Epicardial Adipose Tissue Attenuation Independent of Lipid Lowering: A Potential Pleiotropic Effect. <i>Journal of the American Heart Association</i> , 2019 , 8, e013104	6	35
117	Inhibition of serine palmitoyl transferase I reduces cardiac ceramide levels and increases glycolysis rates following diet-induced insulin resistance. <i>PLoS ONE</i> , 2012 , 7, e37703	3.7	35
116	Dichloroacetate improves cardiac efficiency after ischemia independent of changes in mitochondrial proton leak. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2001 , 280, H1762-9	5.2	35
115	L-carnitine increases glucose metabolism and mechanical function following ischaemia in diabetic rat heart. <i>Cardiovascular Research</i> , 1995 , 29, 373-378	9.9	33
114	Regulation of malonyl-CoA concentration and turnover in the normal heart. <i>Journal of Biological Chemistry</i> , 2004 , 279, 34298-301	5.4	32
113	Differential effects of central ghrelin on fatty acid metabolism in hypothalamic ventral medial and arcuate nuclei. <i>Physiology and Behavior</i> , 2013 , 118, 165-70	3.5	31
112	High rates of residual fatty acid oxidation during mild ischemia decrease cardiac work and efficiency. <i>Journal of Molecular and Cellular Cardiology</i> , 2009 , 47, 142-8	5.8	31
111	Control of cardiac pyruvate dehydrogenase activity in peroxisome proliferator-activated receptor-alpha transgenic mice. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2003 , 285, H270-6	5.2	31
110	Cloning and expression of rat pancreatic β cell malonyl-CoA decarboxylase. <i>Biochemical Journal</i> , 1999 , 340, 213-217	3.8	31
109	Suppression of 5RAMP-activated protein kinase activity does not impair recovery of contractile function during reperfusion of ischemic hearts. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2009 , 297, H313-21	5.2	30
108	Fatty acid oxidation inhibitors in the management of chronic complications of atherosclerosis. <i>Current Atherosclerosis Reports</i> , 2005 , 7, 63-70	6	30
107	The contribution of glycolysis, glucose oxidation, lactate oxidation, and fatty acid oxidation to ATP production in isolated biventricular working hearts from 2-week-old rabbits. <i>Pediatric Research</i> , 1993 , 34, 735-41	3.2	30
106	Contribution of glycogen and exogenous glucose to glucose metabolism during ischemia in the hypertrophied rat heart. <i>Circulation Research</i> , 1997 , 81, 540-9	15.7	30
105	Fatty Acid Oxidation and Its Relation with Insulin Resistance and Associated Disorders. <i>Annals of Nutrition and Metabolism</i> , 2016 , 68 Suppl 3, 15-20	4.5	30

104	Metabolic therapy for the treatment of ischemic heart disease: reality and expectations. <i>Expert Review of Cardiovascular Therapy</i> , 2007 , 5, 1123-34	2.5	29
103	Synthesis and structure-activity relationship of small-molecule malonyl coenzyme A decarboxylase inhibitors. <i>Journal of Medicinal Chemistry</i> , 2006 , 49, 1517-25	8.3	29
102	Trimetazidine in cardiovascular medicine. <i>International Journal of Cardiology</i> , 2019 , 293, 39-44	3.2	28
101	The peptide hormone adropin regulates signal transduction pathways controlling hepatic glucose metabolism in a mouse model of diet-induced obesity. <i>Journal of Biological Chemistry</i> , 2019 , 294, 13366-13377	5.4	28
100	Direct measurement of energy metabolism in the isolated working rat heart. <i>Journal of Pharmacological and Toxicological Methods</i> , 1997 , 38, 11-7	1.7	28
99	Regulation of cardiac malonyl-CoA content and fatty acid oxidation during increased cardiac power. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2005 , 289, H1033-7	5.2	28
98	Cardiac branched-chain amino acid oxidation is reduced during insulin resistance in the heart. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2018 , 315, E1046-E1052	6	26
97	Metabolic response to an acute jump in cardiac workload: effects on malonyl-CoA, mechanical efficiency, and fatty acid oxidation. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2008 , 294, H954-60	5.2	26
96	Malonyl-CoA decarboxylase inhibition as a novel approach to treat ischemic heart disease. <i>Cardiovascular Drugs and Therapy</i> , 2006 , 20, 433-9	3.9	26
95	Relative importance of malonyl CoA and carnitine in maturation of fatty acid oxidation in newborn rabbit heart. <i>American Journal of Physiology - Heart and Circulatory Physiology</i> , 2003 , 284, H283-9	5.2	26
94	Ketones can become the major fuel source for the heart but do not increase cardiac efficiency. <i>Cardiovascular Research</i> , 2021 , 117, 1178-1187	9.9	26
93	Obesity and type 2 diabetes have additive effects on left ventricular remodelling in normotensive patients-a cross sectional study. <i>Cardiovascular Diabetology</i> , 2017 , 16, 21	8.7	25
92	Ketone metabolism in the failing heart. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2020 , 1865, 158813	5	25
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