E Dale Abel

List of Publications by Year
in descending order

244 papers	29,936 citations	3721 89 h-index	5364 164 g-index
267 all docs	267 docs citations	267 times ranked	33914 citing authors

#	Article	IF	Citations
1	Diabetic Cardiomyopathy Revisited. Circulation, 2007, 115, 3213-3223.	1.6	1,338
2	Adipose-selective targeting of the GLUT4 gene impairs insulin action in muscle and liver. Nature, 2001, 409, 729-733.	13.7	1,058
3	Phosphoenolpyruvate Is a Metabolic Checkpoint of Anti-tumor T Cell Responses. Cell, 2015, 162, 1217-1228.	13.5	1,044
4	The Glucose Transporter Glut1 Is Selectively Essential for CD4ÂT Cell Activation and Effector Function. Cell Metabolism, 2014, 20, 61-72.	7.2	876
5	PGC-1Î± Deficiency Causes Multi-System Energy Metabolic Derangements: Muscle Dysfunction, Abnormal Weight Control and Hepatic Steatosis. PLoS Biology, 2005, 3, e101.	2.6	817
6	Cardiac Metabolism in Heart Failure. Circulation Research, 2013, 113, 709-724.	2.0	814
7	Molecular mechanisms of diabetic cardiomyopathy. Diabetologia, 2014, 57, 660-671.	2.9	657
8	Cardiac Remodeling in Obesity. Physiological Reviews, 2008, 88, 389-419.	13.1	608
9	Diabetic cardiomyopathy, causes and effects. Reviews in Endocrine and Metabolic Disorders, 2010, 11, 31-39.	2.6	587
10	Mitochondrial Energetics in the Heart in Obesity-Related Diabetes. Diabetes, 2007, 56, 2457-2466.	0.3	524
11	Nicotinamide riboside is uniquely and orally bioavailable in mice and humans. Nature Communications, 2016, 7, 12948.	5.8	498
12	GLUT1 reductions exacerbate Alzheimer's disease vasculo-neuronal dysfunction and degeneration. Nature Neuroscience, 2015, 18, 521-530.	7.1	496
13	Reduced Cardiac Efficiency and Altered Substrate Metabolism Precedes the Onset of Hyperglycemia and Contractile Dysfunction in Two Mouse Models of Insulin Resistance and Obesity. Endocrinology, 2005, 146, 5341-5349.	1.4	461
14	Reduced Mitochondrial Oxidative Capacity and Increased Mitochondrial Uncoupling Impair Myocardial Energetics in Obesity. Circulation, 2005, 112, 2686-2695.	1.6	460
15	Cardiac Energy Metabolism in Heart Failure. Circulation Research, 2021, 128, 1487-1513.	2.0	433
16	Metabolic Reprogramming Is Required for Antibody Production That Is Suppressed in Anergic but Exaggerated in Chronically BAFF-Exposed B Cells. Journal of Immunology, 2014, 192, 3626-3636.	0.4	425
17	Heart Failure in Type 2 Diabetes Mellitus. Circulation Research, 2019, 124, 121-141.	2.0	411
18	Impaired Cardiac Efficiency and Increased Fatty Acid Oxidation in Insulin-Resistant ob/ob Mouse Hearts. Diabetes, 2004, 53, 2366-2374.	0.3	395

#	Article	IF	Citations
19	Ceramide is a cardiotoxin in lipotoxic cardiomyopathy. Journal of Lipid Research, 2008, 49, 2101-2112.	2.0	334
20	Disruption of the circadian clock within the cardiomyocyte influences myocardial contractile function, metabolism, and gene expression. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 294, H1036-H1047.	1.5	310
21	Cardiac hypertrophy with preserved contractile function after selective deletion of GLUT4 from the heart. Journal of Clinical Investigation, 1999, 104, 1703-1714.	3.9	310
22	Insulin signaling coordinately regulates cardiac size, metabolism, and contractile protein isoform expression. Journal of Clinical Investigation, 2002, 109, 629-639.	3.9	297
23	Insulin Signaling and Heart Failure. Circulation Research, 2016, 118, 1151-1169.	2.0	292
24	Basic Mechanisms of Diabetic Heart Disease. Circulation Research, 2020, 126, 1501-1525.	2.0	279
25	Contribution of Impaired Myocardial Insulin Signaling to Mitochondrial Dysfunction and Oxidative Stress in the Heart. Circulation, 2009, 119, 1272-1283.	1.6	277
26	Lipotoxicity in the heart. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2010, 1801, 311-319.	1.2	259
27	Ablation of PGC-1Î² Results in Defective Mitochondrial Activity, Thermogenesis, Hepatic Function, and Cardiac Performance. PLoS Biology, 2006, 4, e369.	2.6	249
28	Rodent models of diabetic cardiomyopathy. DMM Disease Models and Mechanisms, 2009, 2, 454-466.	1.2	231
29	Inefficient Reprogramming of Fibroblasts into Cardiomyocytes Using Gata4, Mef2c, and Tbx5. Circulation Research, 2012, 111, 50-55.	2.0	227
30	Targeted deletion of BMK1/ERK5 in adult mice perturbs vascular integrity and leads to endothelial failure. Journal of Clinical Investigation, 2004, 113, 1138-1148.	3.9	227
31	Mitochondrial Reactive Oxygen Species in Lipotoxic Hearts Induce Post-Translational Modifications of AKAP121, DRP1, and OPA1 That Promote Mitochondrial Fission. Circulation Research, 2018, 122, 58-73.	2.0	225
32	Mitochondrial adaptations to physiological vs. pathological cardiac hypertrophy. Cardiovascular Research, 2011, 90, 234-242.	1.8	220
33	Mitochondria in the diabetic heart. Cardiovascular Research, 2010, 88, 229-240.	1.8	213
34	Assessing Cardiac Metabolism. Circulation Research, 2016, 118, 1659-1701.	2.0	211
35	The Role of mPer2 Clock Gene in Glucocorticoid and Feeding Rhythms. Endocrinology, 2009, 150, 2153-2160.	1.4	210
36	Recipes for Creating Animal Models of Diabetic Cardiovascular Disease. Circulation Research, 2007, 100, 1415-1427.	2.0	206

#	Article	IF	Citations
37	Responses of GLUT4-Deficient Hearts to Ischemia Underscore the Importance of Glycolysis. Circulation, 2001, 103, 2961-2966.	1.6	197
38	Akt Signaling Mediates Postnatal Heart Growth in Response to Insulin and Nutritional Status. Journal of Biological Chemistry, 2002, 277, 37670-37677.	1.6	197
39	Minimally invasive aortic banding in mice: effects of altered cardiomyocyte insulin signaling during pressure overload. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 285, H1261-H1269.	1.5	197
40	Insulin Stimulates Mitochondrial Fusion and Function in Cardiomyocytes via the Akt-mTOR-NFÎºB-Opa-1 Signaling Pathway. Diabetes, 2014, 63, 75-88.	0.3	195
41	AMPK Is Essential to Balance Glycolysis and Mitochondrial Metabolism to Control T-ALL Cell Stress and Survival. Cell Metabolism, 2016, 23, 649-662.	7.2	195
42	Insulin signaling coordinately regulates cardiac size, metabolism, and contractile protein isoform expression. Journal of Clinical Investigation, 2002, 109, 629-639.	3.9	194
43	Ceramide Mediates Vascular Dysfunction in Diet-Induced Obesity by PP2A-Mediated Dephosphorylation of the eNOS-Akt Complex. Diabetes, 2012, 61, 1848-1859.	0.3	193
44	Excessive cardiac insulin signaling exacerbates systolic dysfunction induced by pressure overload in rodents. Journal of Clinical Investigation, 2010, 120, 1506-1514.	3.9	192
45	Glucose transport in the heart. Frontiers in Bioscience - Landmark, 2004, 9, 201.	3.0	188
46	The intrinsic circadian clock within the cardiomyocyte. American Journal of Physiology - Heart and Circulatory Physiology, 2005, 289, H1530-H1541.	1.5	179
47	Divergent roles for thyroid hormone receptor Î² isoforms in the endocrine axis and auditory system. Journal of Clinical Investigation, 1999, 104, 291-300.	3.9	179
48	Insulin-Like Growth Factor I Receptor Signaling Is Required for Exercise-Induced Cardiac Hypertrophy. Molecular Endocrinology, 2008, 22, 2531-2543.	3.7	178
49	Tissue-Specific Remodeling of the Mitochondrial Proteome in Type 1 Diabetic Akita Mice. Diabetes, 2009, 58, 1986-1997.	0.3	175
50	Contribution of Insulin and Akt1 Signaling to Endothelial Nitric Oxide Synthase in the Regulation of Endothelial Function and Blood Pressure. Circulation Research, 2009, 104, 1085-1094.	2.0	173
51	Insulin Resistance: Metabolic Mechanisms and Consequences in the Heart. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, 2068-2076.	1.1	171
52	Critical role for thyroid hormone receptor Î²2 in the regulation of paraventricular thyrotropin-releasing hormone neurons. Journal of Clinical Investigation, 2001, 107, 1017-1023.	3.9	170
53	Type 1 Diabetic Akita Mouse Hearts Are Insulin Sensitive but Manifest Structurally Abnormal Mitochondria That Remain Coupled Despite Increased Uncoupling Protein 3. Diabetes, 2008, 57, 2924-2932.	0.3	166
54	Molecular mechanisms for myocardial mitochondrial dysfunction in the metabolic syndrome. Clinical Science, 2008, 114, 195-210.	1.8	165

#	Article	IF	Citations
55	Lipids, lysosomes, and autophagy. Journal of Lipid Research, 2016, 57, 1619-1635.	2.0	163
56	Modulation of Glucose Transporter 1 (GLUT1) Expression Levels Alters Mouse Mammary Tumor Cell Growth In Vitro and In Vivo. PLoS ONE, 2011, 6, e23205.	1.1	159
57	<scp>OPA</scp> 1 deficiency promotes secretion of <scp>FGF</scp> 21 from muscle that prevents obesity and insulin resistance. EMBO Journal, 2017, 36, 2126-2145.	3.5	157
58	Mitochondrial Uncoupling: A Key Contributor to Reduced Cardiac Efficiency in Diabetes. Physiology, 2006, 21, 250-258.	1.6	153
59	NADPH Oxidase-derived Reactive Oxygen Species Increases Expression of Monocyte Chemotactic Factor Genes in Cultured Adipocytes. Journal of Biological Chemistry, 2012, 287, 10379-10393.	1.6	152
60	The transcriptional coactivator PGC-1Î± is essential for maximal and efficient cardiac mitochondrial fatty acid oxidation and lipid homeostasis. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 295, H185-H196.	1.5	148
61	Dietary iron restriction or iron chelation protects from diabetes and loss of Î²-cell function in the obese (ob/ob lep^{â^'/â^'}) mouse. American Journal of Physiology - Endocrinology and Metabolism, 2010, 298, E1236-E1243.	1.8	142
62	Preferential Oxidation of Triacylglyceride-Derived Fatty Acids in Heart Is Augmented by the Nuclear Receptor PPARÎ±. Circulation Research, 2010, 107, 233-241.	2.0	141
63	Mechanisms for increased myocardial fatty acid utilization following short-term high-fat feeding. Cardiovascular Research, 2009, 82, 351-360.	1.8	140
64	Inhibition of MCU forces extramitochondrial adaptations governing physiological and pathological stress responses in heart. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 9129-9134.	3.3	140
65	PPARÎ³-induced cardiolipotoxicity in mice is ameliorated by PPARÎ± deficiency despite increases in fatty acid oxidation. Journal of Clinical Investigation, 2010, 120, 3443-3454.	3.9	137
66	PGC-1Î² Deficiency Accelerates the Transition to Heart Failure in Pressure Overload Hypertrophy. Circulation Research, 2011, 109, 783-793.	2.0	136
67	Impaired Transcriptional Activity of Nrf2 in Age-Related Myocardial Oxidative Stress Is Reversible by Moderate Exercise Training. PLoS ONE, 2012, 7, e45697.	1.1	136
68	Insulin and IGF-1 receptors regulate FoxO-mediated signaling in muscle proteostasis. Journal of Clinical Investigation, 2016, 126, 3433-3446.	3.9	132
69	Targeting myocardial substrate metabolism in heart failure: potential for new therapies. European Journal of Heart Failure, 2012, 14, 120-129.	2.9	130
70	Erythropoietin prevents the acute myocardial inflammatory response induced by ischemia/reperfusion via induction of AP-1. Cardiovascular Research, 2005, 65, 719-727.	1.8	128
71	Energy-preserving effects of IGF-1 antagonize starvation-induced cardiac autophagy. Cardiovascular Research, 2012, 93, 320-329.	1.8	124
72	Akt1 in the cardiovascular system: friend or foe?. Journal of Clinical Investigation, 2005, 115, 2059-2064.	3.9	122

#	Article	IF	Citations
73	A Conserved Role for Phosphatidylinositol 3-Kinase but Not Akt Signaling in Mitochondrial Adaptations that Accompany Physiological Cardiac Hypertrophy. Cell Metabolism, 2007, 6, 294-306.	7.2	121
74	Iron Overload and Diabetes Risk: A Shift From Glucose to Fatty Acid Oxidation and Increased Hepatic Glucose Production in a Mouse Model of Hereditary Hemochromatosis. Diabetes, 2011, 60, 80-87.	0.3	120
75	Differential glucose requirement in skin homeostasis and injury identifies a therapeutic target for psoriasis. Nature Medicine, 2018, 24, 617-627.	15.2	117
76	Dilated Cardiomyopathy Resulting From High-Level Myocardial Expression of Cre-Recombinase. Journal of Cardiac Failure, 2006, 12, 392-398.	0.7	112
77	Mitochondrial Calpain-1 Disrupts ATP Synthase and Induces Superoxide Generation in Type 1 Diabetic Hearts: A Novel Mechanism Contributing to Diabetic Cardiomyopathy. Diabetes, 2016, 65, 255-268.	0.3	112
78	Loss of Lipoprotein Lipase-derived Fatty Acids Leads to Increased Cardiac Glucose Metabolism and Heart Dysfunction. Journal of Biological Chemistry, 2006, 281, 8716-8723.	1.6	111
79	SWELL1 is a regulator of adipocyte size, insulin signalling and glucose homeostasis. Nature Cell Biology, 2017, 19, 504-517.	4.6	111
80	Insulin receptor substrate signaling suppresses neonatal autophagy in the heart. Journal of Clinical Investigation, 2013, 123, 5319-5333.	3.9	106
81	Evidence of Glycolysis Up-Regulation andÂPyruvate Mitochondrial Oxidation Mismatch During Mechanical Unloading ofÂthe Failing Human Heart. JACC Basic To Translational Science, 2016, 1, 432-444.	1.9	105
82	Targeted Inhibition of Calpain Reduces Myocardial Hypertrophy and Fibrosis in Mouse Models of Type 1 Diabetes. Diabetes, 2011, 60, 2985-2994.	0.3	104
83	Myeloid Slc2a1-Deficient Murine Model Revealed Macrophage Activation and Metabolic Phenotype Are Fueled by GLUT1. Journal of Immunology, 2019, 202, 1265-1286.	0.4	104
84	Kruppel-like factor 4 is critical for transcriptional control of cardiac mitochondrial homeostasis. Journal of Clinical Investigation, 2015, 125, 3461-3476.	3.9	104
85	Role of the GLUT1 Glucose Transporter in Postnatal CNS Angiogenesis and Blood-Brain Barrier Integrity. Circulation Research, 2020, 127, 466-482.	2.0	103
86	Endothelial nitric oxide synthase phosphorylation in treadmillâ€running mice: role of vascular signalling kinases. Journal of Physiology, 2009, 587, 3911-3920.	1.3	101
87	Inhibiting Insulin-Mediated Î² ₂ -Adrenergic Receptor Activation Prevents Diabetes-Associated Cardiac Dysfunction. Circulation, 2017, 135, 73-88.	1.6	98
88	Lipid-induced NOX2 activation inhibits autophagic flux by impairing lysosomal enzyme activity. Journal of Lipid Research, 2015, 56, 546-561.	2.0	94
89	Mouse and Human Resistins Impair Glucose Transport in Primary Mouse Cardiomyocytes, and Oligomerization Is Required for This Biological Action. Journal of Biological Chemistry, 2005, 280, 31679-31685.	1.6	93
90	Ceramide-Initiated Protein Phosphatase 2A Activation Contributes to Arterial Dysfunction In Vivo. Diabetes, 2015, 64, 3914-3926.	0.3	92

#	Article	IF	Citations
91	DNA-PK Promotes the Mitochondrial, Metabolic, and Physical Decline that Occurs During Aging. Cell Metabolism, 2017, 25, 1135-1146.e7.	7.2	92
92	An APPL1-AMPK signaling axis mediates beneficial metabolic effects of adiponectin in the heart. American Journal of Physiology - Endocrinology and Metabolism, 2010, 299, E721-E729.	1.8	91
93	Mechanisms of Lipotoxicity in the Cardiovascular System. Current Hypertension Reports, 2012, 14, 517-531.	1.5	91
94	Iron-Mediated Inhibition of Mitochondrial Manganese Uptake Mediates Mitochondrial Dysfunction in a Mouse Model of Hemochromatosis. Molecular Medicine, 2008, 14, 98-108.	1.9	89
95	Mitochondrial fusion and function in Charcotâ€“Marieâ€“Tooth type 2A patient fibroblasts with mitofusin 2 mutations. Experimental Neurology, 2008, 211, 115-127.	2.0	88
96	Nuclear Receptor SHP, a Death Receptor That Targets Mitochondria, Induces Apoptosis and Inhibits Tumor Growth. Molecular and Cellular Biology, 2010, 30, 1341-1356.	1.1	87
97	Lipotoxicity contributes to endothelial dysfunction: A focus on the contribution from ceramide. Reviews in Endocrine and Metabolic Disorders, 2013, 14, 59-68.	2.6	87
98	Mitochondrial pyruvate carriers are required for myocardial stress adaptation. Nature Metabolism, 2020, 2, 1248-1264.	5.1	87
99	Nrf2 deficiency prevents reductive stress-induced hypertrophic cardiomyopathy. Cardiovascular Research, 2013, 100, 63-73.	1.8	86
100	PGC-1 Proteins and Heart Failure. Trends in Cardiovascular Medicine, 2012, 22, 98-105.	2.3	85
101	Insulin Receptor Substrates Are Essential for the Bioenergetic and Hypertrophic Response of the Heart to Exercise Training. Molecular and Cellular Biology, 2014, 34, 3450-3460.	1.1	85
102	A Universal Approach to Analyzing Transmission Electron Microscopy with ImageJ. Cells, 2021, 10, 2177.	1.8	85
103	Novel insight from transgenic mice into thyroid hormone resistance and the regulation of thyrotropin. Journal of Clinical Investigation, 1999, 103, 271-279.	3.9	85
104	Evidence for mitochondrial thioesterase 1 as a peroxisome proliferator-activated receptor-Î±-regulated gene in cardiac and skeletal muscle. American Journal of Physiology - Endocrinology and Metabolism, 2004, 287, E888-E895.	1.8	84
105	Enhanced Cardiac Akt/Protein Kinase B Signaling Contributes to Pathological Cardiac Hypertrophy in Part by Impairing Mitochondrial Function via Transcriptional Repression of Mitochondrion-Targeted Nuclear Genes. Molecular and Cellular Biology, 2015, 35, 831-846.	1.1	84
106	Distinct transcriptional regulation of long-chain acyl-CoA synthetase isoforms and cytosolic thioesterase 1 in the rodent heart by fatty acids and insulin. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 290, H2480-H2497.	1.5	83
107	Mammalian Target of Rapamycin Is a Critical Regulator of Cardiac Hypertrophy in Spontaneously Hypertensive Rats. Hypertension, 2009, 54, 1321-1327.	1.3	82
108	Glucose metabolism induced by Bmp signaling is essential for murine skeletal development. Nature Communications, 2018, 9, 4831.	5.8	82

#	Article	IF	Citations
109	Central Leptin Signaling Is Required to Normalize Myocardial Fatty Acid Oxidation Rates in Caloric-Restricted ob/ob Mice. Diabetes, 2011, 60, 1424-1434.	0.3	81
110	Inducible Overexpression of GLUT1 Prevents Mitochondrial Dysfunction and Attenuates Structural Remodeling in Pressure Overload but Does Not Prevent Left Ventricular Dysfunction. Journal of the American Heart Association, 2013, 2, e000301.	1.6	78
111	Insulin Inhibits Cardiac Contractility by Inducing a Gi-Biased Î²2-Adrenergic Signaling in Hearts. Diabetes, 2014, 63, 2676-2689.	0.3	77
112	Deletion of IGF-1 Receptors in Cardiomyocytes Attenuates Cardiac Aging in Male Mice. Endocrinology, 2016, 157, 336-345.	1.4	75
113	Mechanistic Target of Rapamycin (Mtor) Is Essential for Murine Embryonic Heart Development and Growth. PLoS ONE, 2013, 8, e54221.	1.1	74
114	Talin1 Has Unique Expression versus Talin 2 in the Heart and Modifies the Hypertrophic Response to Pressure Overload. Journal of Biological Chemistry, 2013, 288, 4252-4264.	1.6	73
115	Modulating GLUT1 expression in retinal pigment epithelium decreases glucose levels in the retina: impact on photoreceptors and MÃ¼ller glial cells. American Journal of Physiology - Cell Physiology, 2019, 316, C121-C133.	2.1	73
116	Therapeutic potential of targeting oxidative stress in diabetic cardiomyopathy. Free Radical Biology and Medicine, 2021, 169, 317-342.	1.3	73
117	Impaired insulin signaling accelerates cardiac mitochondrial dysfunction after myocardial infarction. Journal of Molecular and Cellular Cardiology, 2009, 46, 910-918.	0.9	71
118	The glucose transporter GLUT3 controls T helper 17 cell responses through glycolytic-epigenetic reprogramming. Cell Metabolism, 2022, 34, 516-532.e11.	7.2	70
119	Myocardial Insulin Resistance and Cardiac Complications of Diabetes. Current Drug Targets Immune, Endocrine and Metabolic Disorders, 2005, 5, 219-226.	1.8	69
120	p63 and SOX2 Dictate Glucose Reliance and Metabolic Vulnerabilities in Squamous Cell Carcinomas. Cell Reports, 2019, 28, 1860-1878.e9.	2.9	68
121	PAS kinase is required for normal cellular energy balance. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15466-15471.	3.3	65
122	GLUT1 Expression in Tumor-Associated Neutrophils Promotes Lung Cancer Growth and Resistance to Radiotherapy. Cancer Research, 2021, 81, 2345-2357.	0.4	65
123	Cardiac PI3K-Akt Impairs Insulin-Stimulated Glucose Uptake Independent of mTORC1 and GLUT4 Translocation. Molecular Endocrinology, 2013, 27, 172-184.	3.7	61
124	Type 2 Iodothyronine Deiodinase Transgene Expression in the Mouse Heart Causes Cardiac-Specific Thyrotoxicosis1. Endocrinology, 2001, 142, 13-20.	1.4	59
125	Deletion of GLUT1 and GLUT3 Reveals Multiple Roles for Glucose Metabolism in Platelet and Megakaryocyte Function. Cell Reports, 2017, 20, 881-894.	2.9	57
126	Insulin Signaling Regulates Mitochondrial Function in Pancreatic Î²-Cells. PLoS ONE, 2009, 4, e7983.	1.1	57

#	Article	IF	Citations
127	MÃ©nage-Ã-Trois 1 Is Critical for the Transcriptional Function of PPARÎ³ Coactivator 1. Cell Metabolism, 2007, 5, 129-142.	7.2	56
128	Genetic loss of insulin receptors worsens cardiac efficiency in diabetes. Journal of Molecular and Cellular Cardiology, 2012, 52, 1019-1026.	0.9	56
129	Early Mitochondrial Adaptations in Skeletal Muscle to Diet-Induced Obesity Are Strain Dependent and Determine Oxidative Stress and Energy Expenditure But Not Insulin Sensitivity. Endocrinology, 2012, 153, 2677-2688.	1.4	55
130	Exposure to Static Magnetic and Electric Fields Treats Type 2 Diabetes. Cell Metabolism, 2020, 32, 561-574.e7.	7.2	55
131	Both aerobic glycolysis and mitochondrial respiration are required for osteoclast differentiation. FASEB Journal, 2020, 34, 11058-11067.	0.2	55
132	Loss of MCU prevents mitochondrial fusion in G ₁ -S phase and blocks cell cycle progression and proliferation. Science Signaling, 2019, 12, .	1.6	54
133	The Role of Nonglycolytic Glucose Metabolism in Myocardial Recovery Upon Mechanical Unloading and Circulatory Support in Chronic Heart Failure. Circulation, 2020, 142, 259-274.	1.6	53
134	Podocyte-Specific GLUT4-Deficient Mice Have Fewer and Larger Podocytes and Are Protected From Diabetic Nephropathy. Diabetes, 2014, 63, 701-714.	0.3	52
135	Genetic disruption of the cardiomyocyte circadian clock differentially influences insulin-mediated processes in the heart. Journal of Molecular and Cellular Cardiology, 2017, 110, 80-95.	0.9	52
136	The glucose transporter GLUT1 is required for ErbB2-induced mammary tumorigenesis. Breast Cancer Research, 2016, 18, 131.	2.2	50
137	Insulin signaling in heart muscle: Lessons from genetically engineered mouse models. Current Hypertension Reports, 2004, 6, 416-423.	1.5	49
138	Heart-Specific Ablation of Prkar1a Causes Failure of Heart Development and Myxomagenesis. Circulation, 2008, 117, 1414-1422.	1.6	49
139	Receptor activator of nuclear factor-Î¹B ligand is a novel inducer of myocardial inflammation. Cardiovascular Research, 2012, 94, 105-114.	1.8	48
140	Airway epithelial regeneration requires autophagy and glucose metabolism. Cell Death and Disease, 2019, 10, 875.	2.7	48
141	UCP3 Regulates Cardiac Efficiency and Mitochondrial Coupling in High Fat-Fed Mice but Not in Leptin-Deficient Mice. Diabetes, 2012, 61, 3260-3269.	0.3	46
142	OPA1 deletion in brown adipose tissue improves thermoregulation and systemic metabolism via FGF21. ELife, 2021, 10, .	2.8	45
143	Dominant Inhibition of Thyroid Hormone Action Selectively in the Pituitary of Thyroid Hormone Receptor-Î² Null Mice Abolishes the Regulation of Thyrotropin by Thyroid Hormone. Molecular Endocrinology, 2003, 17, 1767-1776.	3.7	44
144	Maintaining PGCâ€1Î± expression following pressure overloadâ€induced cardiac hypertrophy preserves angiogenesis but not contractile or mitochondrial function. FASEB Journal, 2014, 28, 3691-3702.	0.2	44

#	Article	IF	Citations
145	Cardiac Hypertrophy Caused by Peroxisome Proliferator- Activated Receptor-Î³ Agonist Treatment Occurs Independently of Changes in Myocardial Insulin Signaling. Endocrinology, 2007, 148, 6047-6053.	1.4	42
146	Cerebellar Neurons Possess a Vesicular Compartment Structurally and Functionally Similar to Glut4-Storage Vesicles from Peripheral Insulin-Sensitive Tissues. Journal of Neuroscience, 2009, 29, 5193-5201.	1.7	42
147	Interaction of myocardial insulin receptor and IGF receptor signaling in exercise-induced cardiac hypertrophy. Journal of Molecular and Cellular Cardiology, 2009, 47, 664-675.	0.9	42
148	Nox4 reprograms cardiac substrate metabolism via protein O-GlcNAcylation to enhance stress adaptation. JCI Insight, 2017, 2, .	2.3	42
149	Cardiac Dysfunction Caused by Myocardium-Specific Expression of a Mutant Thyroid Hormone Receptor. Circulation Research, 2000, 86, 700-706.	2.0	41
150	Increased Glucose Availability Attenuates Myocardial Ketone Body Utilization. Journal of the American Heart Association, 2020, 9, e013039.	1.6	41
151	Maintaining Myocardial Glucose Utilization in Diabetic Cardiomyopathy Accelerates Mitochondrial Dysfunction. Diabetes, 2020, 69, 2094-2111.	0.3	41
152	CRYAB and HSPB2 deficiency alters cardiac metabolism and paradoxically confers protection against myocardial ischemia in aging mice. American Journal of Physiology - Heart and Circulatory Physiology, 2007, 293, H3201-H3209.	1.5	40
153	SWELL1 regulates skeletal muscle cell size, intracellular signaling, adiposity and glucose metabolism. ELife, 2020, 9, .	2.8	40
154	Gender-dependent attenuation of cardiac potassium currents in type 2 diabeticdb/dbmice. Journal of Physiology, 2004, 555, 345-354.	1.3	39
155	IGFâ€1 receptor deficiency in thyrocytes impairs thyroid hormone secretion and completely inhibits TSHâ€stimulated goiter. FASEB Journal, 2013, 27, 4899-4908.	0.2	39
156	GLUT1 deficiency in cardiomyocytes does not accelerate the transition from compensated hypertrophy to heart failure. Journal of Molecular and Cellular Cardiology, 2014, 72, 95-103.	0.9	39
157	Glucose transporter 4-deficient hearts develop maladaptive hypertrophy in response to physiological or pathological stresses. American Journal of Physiology - Heart and Circulatory Physiology, 2017, 313, H1098-H1108.	1.5	39
158	Increased glycolysis mediates Wnt7bâ€induced bone formation. FASEB Journal, 2019, 33, 7810-7821.	0.2	38
159	Captopril Normalizes Insulin Signaling and Insulin-Regulated Substrate Metabolism in Obese (ob/ob) Mouse Hearts. Endocrinology, 2008, 149, 4043-4050.	1.4	37
160	Regulation of fatty acid metabolism by mTOR in adult murine hearts occurs independently of changes in PGC-1Î±. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 305, H41-H51.	1.5	35
161	Exercise training improves vascular mitochondrial function. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 310, H821-H829.	1.5	35
162	Protocols for Generating Surfaces and Measuring 3D Organelle Morphology Using Amira. Cells, 2022, 11, 65.	1.8	35

#	Article	IF	Citations
163	Aberrant Water Homeostasis Detected by Stable Isotope Analysis. PLoS ONE, 2010, 5, e11699.	1.1	34
164	Insulin-dependent metabolic and inotropic responses in the heart are modulated by hydrogen peroxide from NADPH-oxidase isoforms NOX2 and NOX4. Free Radical Biology and Medicine, 2017, 113, 16-25.	1.3	33
165	Glucose Metabolism Is Required for Platelet Hyperactivation in a Murine Model of Type 1 Diabetes. Diabetes, 2019, 68, 932-938.	0.3	33
166	Autophagy Reprograms Alveolar Progenitor Cell Metabolism in Response to Lung Injury. Stem Cell Reports, 2020, 14, 420-432.	2.3	33
167	Acute Inhibition of Fatty Acid Import Inhibits GLUT4 Transcription in Adipose Tissue, but Not Skeletal or Cardiac Muscle Tissue, Partly Through Liver X Receptor (LXR) Signaling. Diabetes, 2010, 59, 800-807.	0.3	32
168	Myocardial mitochondrial dysfunction in mice lacking adiponectin receptor 1. Basic Research in Cardiology, 2015, 110, 37.	2.5	32
169	Activation of IGF-1 receptors and Akt signaling by systemic hyperinsulinemia contributes to cardiac hypertrophy but does not regulate cardiac autophagy in obese diabetic mice. Journal of Molecular and Cellular Cardiology, 2017, 113, 39-50.	0.9	32
170	Insulin suppresses ischemic preconditioning-mediated cardioprotection through Akt-dependent mechanisms. Journal of Molecular and Cellular Cardiology, 2013, 64, 20-29.	0.9	31
171	Oxidative Phosphorylation Flexibility in the Liver of Mice Resistant to High-Fat Dietâ€“Induced Hepatic Steatosis. Diabetes, 2011, 60, 2216-2224.	0.3	30
172	The absence of insulin signaling in the heart induces changes in potassium channel expression and ventricular repolarization. American Journal of Physiology - Heart and Circulatory Physiology, 2014, 306, H747-H754.	1.5	30
173	Insulin Regulation of Myocardial Autophagy. Circulation Journal, 2014, 78, 2569-2576.	0.7	29
174	Antioxidant treatment normalizes mitochondrial energetics and myocardial insulin sensitivity independently of changes in systemic metabolic homeostasis in a mouse model of the metabolic syndrome. Journal of Molecular and Cellular Cardiology, 2015, 85, 104-116.	0.9	28
175	Insulin and IGF-1 receptors regulate complex Iâ€“dependent mitochondrial bioenergetics and supercomplexes via FoxOs in muscle. Journal of Clinical Investigation, 2021, 131, .	3.9	28
176	Deletion of the NADPH-Cytochrome P450 Reductase Gene in Cardiomyocytes Does Not Protect Mice against Doxorubicin-Mediated Acute Cardiac Toxicity. Drug Metabolism and Disposition, 2008, 36, 1722-1728.	1.7	27
177	Reductive Stress Causes Pathological Cardiac Remodeling and Diastolic Dysfunction. Antioxidants and Redox Signaling, 2020, 32, 1293-1312.	2.5	27
178	Insulin Signaling In the Heart. American Journal of Physiology - Endocrinology and Metabolism, 2021, 321, E130-E145.	1.8	27
179	Regulation of Insulin-Responsive Aminopeptidase Expression and Targeting in the Insulin-Responsive Vesicle Compartment of Glucose Transporter Isoform 4-Deficient Cardiomyocytes. Molecular Endocrinology, 2004, 18, 2491-2501.	3.7	26
180	Cytosolic, but not mitochondrial, oxidative stress is a likely contributor to cardiac hypertrophy resulting from cardiac specific GLUT4 deletion in mice. FEBS Journal, 2012, 279, 599-611.	2.2	26

#	Article	IF	Citations
181	Glucose Transporter 3 Potentiates Degranulation and Is Required for Platelet Activation. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 1628-1639.	1.1	25
182	Comparison of the Effects of Highâ€Fat Diet on Energy Flux in Mice Using Two Multiplexed Metabolic Phenotyping Systems. Obesity, 2019, 27, 793-802.	1.5	24
183	Deletion of GLUT1 in mouse lens epithelium leads to cataract formation. Experimental Eye Research, 2018, 172, 45-53.	1.2	22
184	Modulation of the cardiovascular system by leptin. Biochimie, 2012, 94, 2097-2103.	1.3	21
185	Deep Sequence Analysis of Gene Expression Identifies Osteopontin as a Downstream Effector of Integrin-Linked Kinase (ILK) in Cardiac-Specific ILK Knockout Mice. Circulation: Heart Failure, 2014, 7, 184-193.	1.6	21
186	Phosphoinositide dependent protein kinase 1 is required for exercise-induced cardiac hypertrophy but not the associated mitochondrial adaptations. Journal of Molecular and Cellular Cardiology, 2015, 89, 297-305.	0.9	21
187	Hearts lacking caveolin-1 develop hypertrophy with normal cardiac substrate metabolism. Cell Cycle, 2008, 7, 2509-2518.	1.3	20
188	Substrate uptake and metabolism are preserved in hypertrophic caveolin-3 knockout hearts. American Journal of Physiology - Heart and Circulatory Physiology, 2008, 295, H657-H666.	1.5	20
189	HSPB2 Is Dispensable for the Cardiac Hypertrophic Response but Reduces Mitochondrial Energetics following Pressure Overload In Mice. PLoS ONE, 2012, 7, e42118.	1.1	20
190	Superoxide Dismutase 2 is dispensable for platelet function. Thrombosis and Haemostasis, 2017, 117, 1859-1867.	1.8	19
191	Connexin43 and zonula occludens-1 are targets of Akt in cardiomyocytes that correlate with cardiac contractile dysfunction in Akt deficient hearts. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2018, 1864, 1183-1191.	1.8	19
192	Insulin receptor substrates differentially exacerbate insulin-mediated left ventricular remodeling. JCI Insight, 2020, 5, .	2.3	19
193	Knockout of insulin receptors in cardiomyocytes attenuates coronary arterial dysfunction induced by pressure overload. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 300, H374-H381.	1.5	18
194	Snf1-related kinase improves cardiac mitochondrial efficiency and decreases mitochondrial uncoupling. Nature Communications, 2017, 8, 14095.	5.8	18
195	Combined deletion of Glut1 and Glut3 impairs lung adenocarcinoma growth. ELife, 2020, 9, .	2.8	18
196	Loss of Bradykinin Signaling Does Not Accelerate the Development of Cardiac Dysfunction in Type 1 Diabetic Akita Mice. Endocrinology, 2010, 151, 3536-3542.	1.4	17
197	An early endothelial cellâ€“specific requirement for Glut1 is revealed in Glut1 deficiency syndrome model mice. JCI Insight, 2021, 6, .	2.3	17
198	Expression of slow skeletal TnI in adult mouse hearts confers metabolic protection to ischemia. Journal of Molecular and Cellular Cardiology, 2011, 51, 236-243.	0.9	16

#	Article	IF	Citations
199	A low-carbohydrate/high-fat diet reduces blood pressure in spontaneously hypertensive rats without deleterious changes in insulin resistance. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 304, H1733-H1742.	1.5	16
200	Metabolic Determinants of Electrical Failure in Ex-Vivo Canine Model of Cardiac Arrest: Evidence for the Protective Role of Inorganic Pyrophosphate. PLoS ONE, 2013, 8, e57821.	1.1	16
201	FoxO1 is required for physiological cardiac hypertrophy induced by exercise but not by constitutively active PI3K. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 320, H1470-H1485.	1.5	15
202	Spotlight on metabolic remodelling in heart failure. Cardiovascular Research, 2011, 90, 191-193.	1.8	14
203	Cardiomyocyte Specific Deletion of Crif1 Causes Mitochondrial Cardiomyopathy in Mice. PLoS ONE, 2013, 8, e53577.	1.1	14
204	Reversal of oxidative stress in endothelial cells by controlled release of adiponectin. Journal of Controlled Release, 2008, 130, 234-237.	4.8	13
205	Free fatty acid oxidation in insulin resistance and obesity. Heart and Metabolism, 2010, 48, 5-10.	2.0	13
206	Diabetes Suppresses Glucose Uptake and Glycolysis in Macrophages. Circulation Research, 2022, 130, 779-781.	2.0	13
207	Fasting-induced reductions in cardiovascular and metabolic variables occur sooner in obese versus lean mice. Experimental Biology and Medicine, 2010, 235, 1489-1497.	1.1	12
208	Prorenin independently causes hypertension and renal and cardiac fibrosis in cyp1a1-prorenin transgenic rats. Clinical Science, 2018, 132, 1345-1363.	1.8	12
209	Glucose for the Aging Heart?. Circulation, 2007, 116, 884-887.	1.6	11
210	Calpain-2 specifically cleaves Junctophilin-2 at the same site as Calpain-1 but with less efficacy. Biochemical Journal, 2021, 478, 3539-3553.	1.7	11
211	Optical mapping of propagation changes induced by elevated extracellular potassium ion concentration in genetically altered mouse hearts. Journal of Electrocardiology, 2004, 37, 128-134.	0.4	10
212	Absence of glucose transporter 4 diminishes electrical activity of mouse hearts during hypoxia. Experimental Physiology, 2013, 98, 746-757.	0.9	10
213	Thyrocyteâ€specific deletion of insulin and IGFâ€1 receptors induces papillary thyroid carcinomaâ€like lesions through EGFR pathway activation. International Journal of Cancer, 2018, 143, 2458-2469.	2.3	10
214	Stressâ€induced Cyclin C Translocation Regulates Cardiac Mitochondrial Dynamics. Journal of the American Heart Association, 2020, 9, e014366.	1.6	10
215	Perinatal versus adult loss of ULK1 and ULK2 distinctly influences cardiac autophagy and function. Autophagy, 2022, 18, 2161-2177.	4.3	10
216	MITOCHONDRIAL DYNAMICS AND METABOLIC REGULATION IN CARDIAC AND SKELETAL MUSCLE. Transactions of the American Clinical and Climatological Association, 2018, 129, 266-278.	0.9	9

#	Article	IF	Citations
217	Animal Models of Dysregulated Cardiac Metabolism. Circulation Research, 2022, 130, 1965-1993.	2.0	9
218	Conditional deletion of insulin receptor in thyrocytes does not affect thyroid structure and function. Endocrine Journal, 2011, 58, 1013-1019.	0.7	8
219	A new twist in the function of the cardiac lipid droplet. Nature Medicine, 2011, 17, 1045-1046.	15.2	7
220	Functional resilience of C57BL/6J mouse heart to dietary fat overload. American Journal of Physiology - Heart and Circulatory Physiology, 2021, 321, H850-H864.	1.5	7
221	Effective Metabolic Approaches for the Energy Starved Failing Heart. Circulation Research, 2018, 123, 329-331.	2.0	5
222	Counterpoint: An alternative hypothesis for why exposure to static magnetic and electric fields treats type 2 diabetes. American Journal of Physiology - Endocrinology and Metabolism, 2021, 320, E1001-E1002.	1.8	4
223	Solid Phase Synthesis of Mitochondrial Triphenylphosphonium-Vitamin E Metabolite Using a Lysine Linker for Reversal of Oxidative Stress. PLoS ONE, 2013, 8, e53272.	1.1	4
224	Metabolic perturbations in the diabetic heart: Mechanisms and molecular targets. Drug Discovery Today Disease Mechanisms, 2005, 2, 115-122.	0.8	3
225	Skeletal muscle typeâ€specific mitochondrial adaptation to highâ€fat diet relies on differential autophagy modulation. FASEB Journal, 2021, 35, e21933.	0.2	3
226	Endonuclease G: The Link Between Mitochondria and Cardiac Hypertrophy?. Circulation Research, 2012, 110, 378-380.	2.0	2
227	The Maximal Downstroke of Epicardial Potentials as an Index of Electrical Activity in Mouse Hearts. IEEE Transactions on Biomedical Engineering, 2011, 58, 3175-3183.	2.5	1
228	Mitochondria in Cardiac Disease. , 2012, , 63-82.		1
229	Autophagy in Diabetes and the Metabolic Syndrome. , 2013, , 117-139.		1
230	Alterations in Cardiac Metabolism in Heart Failure. , 2020, , 233-243.e3.		1
231	It takes a village: lessons from collaborative science. Journal of Clinical Investigation, 2021, 131, .	3.9	1
232	Inhibiting vascular ceramide synthesis prevents arterial dysfunction and hypertension in mice with dietâ€induced obesity. FASEB Journal, 2008, 22, 743.5.	0.2	1
233	Time to Look Back and to Look Forward. Diabetes, 2014, 63, 1169-1170.	0.3	0
234	mTOR-Mediated Metabolic Rewiring and Ischemic Preconditioning, Itâ€™s Complicated. Circulation Research, 2021, 128, 652-654.	2.0	0

#	Article	IF	Citations
235	Reply to Petersen et al.: An alternative hypothesis for why exposure to static magnetic and electric fields treats type 2 diabetes. American Journal of Physiology - Endocrinology and Metabolism, 2021, 320, E1004-E1005.	1.8	0
236	Insulin and Growth Factor Regulation of Cardiac Mitochondria. FASEB Journal, 2007, 21, A91.	0.2	0
237	Mitochondrial oxidative stress does not contribute to cardiac hypertrophy in mice with cardiac specific GLUT4 deletion. FASEB Journal, 2008, 22, 614.21.	0.2	0
238	The Metabolic Syndrome and Cardiac Function. Advances in Pulmonary Hypertension, 2008, 7, 332-336.	0.1	0
239	Palmitate evokes ceramideâ€dependent reactive oxygen species (ROS) generation from sources other than NADPH oxidase in bovine aortic endothelial cells (BAECs). FASEB Journal, 2010, 24, 602.7.	0.2	0
240	The tempo of cardiovascular and metabolic responses to fasting is different between lean and obese mice. FASEB Journal, 2010, 24, 978.15.	0.2	0
241	Obesity and Cardiac Dysfunction. , 2011, , 257-292.		0
242	Cardiac Complications of Obesity. FASEB Journal, 2011, 25, 204.1.	0.2	0
243	The Effects of Optic Atrophy Protein (OPA)-1 Deletion on Platelet Function Is Regulated By the Hormonal Milieu. Blood, 2016, 128, 410-410.	0.6	0
244	Patterns of Suppressed Mitochondrial Respiration in Isolated Muscle Fibers from Type 2 Diabetics. FASEB Journal, 2018, 32, 618.26.	0.2	0