Randall L Mynatt

List of Publications by Year
in descending order

78	7,030	117625	71685
papers	citations	34 h-index	76 g-index

81	81	81	11289
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The NLRP3 inflammasome instigates obesity-induced inflammation and insulin resistance. Nature Medicine, 2011, 17, 179-188.	30.7	2,120
2	A High-Fat Diet Coordinately Downregulates Genes Required for Mitochondrial Oxidative Phosphorylation in Skeletal Muscle. Diabetes, 2005, 54, 1926-1933.	0.6	534
3	Characterization of Peripheral Circadian Clocks in Adipose Tissues. Diabetes, 2006, 55, 962-970.	0.6	443
4	Obesity Increases the Production of Proinflammatory Mediators from Adipose Tissue T Cells and Compromises TCR Repertoire Diversity: Implications for Systemic Inflammation and Insulin Resistance. Journal of Immunology, 2010, 185, 1836-1845.	0.8	381
5	Identification of Adropin as a Secreted Factor Linking Dietary Macronutrient Intake with Energy Homeostasis and Lipid Metabolism. Cell Metabolism, 2008, 8, 468-481.	16.2	369
6	Muscle-Specific Deletion of Carnitine Acetyltransferase Compromises Glucose Tolerance and Metabolic Flexibility. Cell Metabolism, 2012, 15, 764-777.	16.2	307
7	Human Mesenchymal Stem Cells as an in Vitro Model for Human Adipogenesis. Obesity, 2003, 11, 65-74.	4.0	239
8	Adropin Deficiency Is Associated With Increased Adiposity and Insulin Resistance. Obesity, 2012, 20, 1394-1402.	3.0	198
9	The Role of the agouti Gene in the Yellow Obese Syndrome ,. Journal of Nutrition, 1997, 127, 1902S-1907S.	2.9	143
10	Circadian Clocks Are Resounding in Peripheral Tissues. PLoS Computational Biology, 2006, 2, e16.	3.2	117
11	Carnitine revisited: potential use as adjunctive treatment in diabetes. Diabetologia, 2007, 50, 824-832.	6.3	99
12	Impaired mitochondrial fat oxidation induces adaptive remodeling of muscle metabolism. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3300-9.	7.1	96
13	Impaired Coordination of Nutrient Intake and Substrate Oxidation in Melanocortin-4 Receptor Knockout Mice. Endocrinology, 2004, 145, 243-252.	2.8	94
14	The effects of calcium channel blockade on agouti â€induced obesity. FASEB Journal, 1996, 10, 1646-1652.	0.5	85
15	Inactivation of the Mitochondrial Carrier SLC25A25 (ATP-Mg2+/Pi Transporter) Reduces Physical Endurance and Metabolic Efficiency in Mice. Journal of Biological Chemistry, 2011, 286, 11659-11671.	3.4	80
16	Impaired Mitochondrial Fat Oxidation Induces FGF21 in Muscle. Cell Reports, 2016, 15, 1686-1699.	6.4	76
17	Agouti Expression in Human Adipose Tissue: Functional Consequences and Increased Expression in Type 2 Diabetes. Diabetes, 2003, 52, 2914-2922.	0.6	74
18	Targeted deletion of melanocortin receptor subtypes 3 and 4, but not CART, alters nutrient partitioning and compromises behavioral and metabolic responses to leptin. FASEB Journal, 2005, 19, 1482-1491.	0.5	72

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19	UCP1 is an essential mediator of the effects of methionine restriction on energy balance but not insulin sensitivity. FASEB Journal, 2015, 29, 2603-2615.	0.5	68
20	Mesenchymal stem cells from the outer ear: a novel adult stem cell model system for the study of adipogenesis. FASEB Journal, 2005, 19, 1205-1207.	0.5	65
21	Induction of Circadian Gene Expression in Human Subcutaneous Adiposeâ€derived Stem Cells. Obesity, 2007, 15, 2560-2570.	3.0	62
22	The Regulation and Activation of Ciliary Neurotrophic Factor Signaling Proteins in Adipocytes. Journal of Biological Chemistry, 2003, 278, 2228-2235.	3.4	61
23	Effects of Cardiotrophin on Adipocytes. Journal of Biological Chemistry, 2004, 279, 47572-47579.	3.4	55
24	Genetic Dissection of the Functions of the Melanocortin-3 Receptor, a Seven-transmembrane G-protein-coupled Receptor, Suggests Roles for Central and Peripheral Receptors in Energy Homeostasis. Journal of Biological Chemistry, 2011, 286, 40771-40781.	3.4	53
25	Circadian Rhythms and the Regulation of Metabolic Tissue Function and Energy Homeostasis. Obesity, 2007, 15, 539-543.	3.0	52
26	Agouti regulates adipocyte transcription factors. American Journal of Physiology - Cell Physiology, 2001, 280, C954-C961.	4.6	47
27	Downregulation of Carnitine Acyl-Carnitine Translocase by miRNAs 132 and 212 Amplifies Glucose-Stimulated Insulin Secretion. Diabetes, 2014, 63, 3805-3814.	0.6	45
28	Pancreatic deletion of the interleukin-1 receptor disrupts whole body glucose homeostasis and promotes islet Î²-cell de-differentiation. Molecular Metabolism, 2018, 14, 95-107.	6.5	45
29	Examination of carnitine palmitoyltransferase 1 abundance in white adipose tissue: implications in obesity research. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2017, 312, R816-R820.	1.8	44
30	Macronutrient Diet Intake of the Lethal Yellow Agouti (Ay/a) Mouse. Physiology and Behavior, 1999, 67, 809-812.	2.1	43
31	Carnitine and type 2 diabetes. Diabetes/Metabolism Research and Reviews, 2009, 25, S45-9.	4.0	41
32	Regulation of leptin by agouti. Physiological Genomics, 2000, 2, 101-105.	2.3	39
33	Skeletal muscle overexpression of nicotinamide phosphoribosyl transferase in mice coupled with voluntary exercise augments exercise endurance. Molecular Metabolism, 2018, 7, 1-11.	6.5	39
34	Overexpression of agouti protein and stress responsiveness in mice. Physiology and Behavior, 2001, 73, 599-608.	2.1	37
35	Cross-talk among gp130 Cytokines in Adipocytes. Journal of Biological Chemistry, 2005, 280, 33856-33863.	3.4	36
36	Hepatic carnitine palmitoyltransferase-I has two independent inhibitory binding sites for regulation of fatty acid oxidation. Lipids and Lipid Metabolism, 1994, 1212, 245-252.	2.6	34

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37	Metabolic sensing in AgRP neurons integrates homeostatic state with dopamine signalling in the striatum. ELife, 2022, 11, .	6.0	32
38	Loss of Oncostatin M Signaling in Adipocytes Induces Insulin Resistance and Adipose Tissue Inflammation in Vivo. Journal of Biological Chemistry, 2016, 291, 17066-17076.	3.4	31
39	Mitochondrial fat oxidation is essential for lipid-induced inflammation in skeletal muscle in mice. Scientific Reports, 2016, 6, 37941.	3.3	30
40	AgRP Neurons Require Carnitine Acetyltransferase to Regulate Metabolic Flexibility and Peripheral Nutrient Partitioning. Cell Reports, 2018, 22, 1745-1759.	6.4	30
41	Proximal Tubular Cellâ€“Specific Ablation of Carnitine Acetyltransferase Causes Tubular Disease and Secondary Glomerulosclerosis. Diabetes, 2019, 68, 819-831.	0.6	29
42	Myocardial carnitine palmitoyltransferase of the mitochondrial outer membrane is not altered by fasting. Lipids and Lipid Metabolism, 1992, 1128, 105-111.	2.6	28
43	Inactivation of adipose angiotensinogen reduces adipose tissue macrophages and increases metabolic activity. Obesity, 2016, 24, 359-367.	3.0	28
44	Fenugreek supplementation during high-fat feeding improves specific markers of metabolic health. Scientific Reports, 2017, 7, 12770.	3.3	27
45	Neuropoietin Attenuates Adipogenesis and Induces Insulin Resistance in Adipocytes. Journal of Biological Chemistry, 2008, 283, 22505-22512.	3.4	26
46	Artemisia scoparia Enhances Adipocyte Development and Endocrine Function In Vitro and Enhances Insulin Action In Vivo. PLoS ONE, 2014, 9, e98897.	2.5	26
47	Choline supplementation increases tissue concentrations of carnitine and lowers body fat in guinea pigs. Journal of Nutritional Biochemistry, 1998, 9, 464-470.	4.2	22
48	Extensive metabolic remodeling after limiting mitochondrial lipid burden is consistent with an improved metabolic health profile. Journal of Biological Chemistry, 2019, 294, 12313-12327.	3.4	22
49	Myeloid-specific deletion of NOX2 prevents the metabolic and neurologic consequences of high fat diet. PLoS ONE, 2017, 12, e0181500.	2.5	21
50	The ubiquitin ligase Siah2 regulates obesity-induced adipose tissue inflammation. Obesity, 2015, 23, 2223-2232.	3.0	20
51	High-fat/low-carbohydrate diets regulate glucose metabolism via a long-term transcriptional loop. Metabolism: Clinical and Experimental, 2006, 55, 1457-1463.	3.4	17
52	Membrane microenvironment regulation of carnitine palmitoyltranferases I and II. Biochemical Society Transactions, 2011, 39, 833-837.	3.4	17
53	Carnitine acetyltransferase (Crat) in hungerâ€sensing AgRP neurons permits adaptation to calorie restriction. FASEB Journal, 2018, 32, 6923-6933.	0.5	16
54	Regulation of PPARÎ³ and Obesity by Agouti/Melanocortin Signaling in Adipocytes. Annals of the New York Academy of Sciences, 2003, 994, 141-146.	3.8	15

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55	Growth hormone, but not insulin, activates STAT5 proteins in adipocytes in vitro and in vivo. Biochemical and Biophysical Research Communications, 2003, 302, 359-362.	2.1	15
56	The RNA binding protein HuR influences skeletal muscle metabolic flexibility in rodents and humans. Metabolism: Clinical and Experimental, 2019, 97, 40-49.	3.4	15
57	Diet-induced adipose tissue expansion is mitigated in mice with a targeted inactivation of mesoderm specific transcript (Mest). PLoS ONE, 2017, 12, e0179879.	2.5	14
58	Short chain acyl-CoA dehydrogenase deficiency and short-term high-fat diet perturb mitochondrial energy metabolism and transcriptional control of lipid-handling in liver. Nutrition and Metabolism, 2016, 13, 17.	3.0	13
59	Leptin responsiveness in mice that ectopically express agouti protein. Physiology and Behavior, 2002, 75, 159-167.	2.1	11
60	Liver-specific expression of the agouti gene in transgenic mice promotes liver carcinogenesis in the absence of obesity and diabetes. Molecular Cancer, 2004, 3, 17.	19.2	11
61	NT-PGC-1Î± deficiency decreases mitochondrial FA oxidation in brown adipose tissue and alters substrate utilization in vivo. Journal of Lipid Research, 2018, 59, 1660-1670.	4.2	11
62	Brain RNA expression in obese vs lean mice after LPS-induced systemic inflammation. Frontiers in Bioscience - Landmark, 2004, 9, 2686.	3.0	10
63	Selective overexpression of Toll-like receptor-4 in skeletal muscle impairs metabolic adaptation to high-fat feeding. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2015, 309, R304-R313.	1.8	10
64	Adipose Tissue Dysfunction Occurs Independently of Obesity in Adipocyteâ€Specific Oncostatin Receptor Knockout Mice. Obesity, 2018, 26, 1439-1447.	3.0	10
65	Brain Transcriptional Responses to High-Fat Diet in Acads-Deficient Mice Reveal Energy Sensing Pathways. PLoS ONE, 2012, 7, e41709.	2.5	9
66	Artemisia supplementation differentially affects the mucosal and luminal ileal microbiota of diet-induced obese mice. Nutrition, 2014, 30, S26-S30.	2.4	9
67	A low fat diet ameliorates pathology but retains beneficial effects associated with CPT1b knockout in skeletal muscle. PLoS ONE, 2017, 12, e0188850.	2.5	9
68	An Extract of Russian Tarragon Prevents Obesityâ€Related Ectopic Lipid Accumulation. Molecular Nutrition and Food Research, 2018, 62, e1700856.	3.3	9
69	Carnitine Acetyltransferase in AgRP Neurons Is Required for the Homeostatic Adaptation to Restricted Feeding in Male Mice. Endocrinology, 2018, 159, 2473-2483.	2.8	8
70	Pancreatic, but not myeloid-cell, expression of interleukin-1alpha is required for maintenance of insulin secretion and whole body glucose homeostasis. Molecular Metabolism, 2021, 44, 101140.	6.5	8
71	Differential RNA expression of hepatic tissue in lean and obese mice after LPS-induced systemic inflammation. Frontiers in Bioscience - Landmark, 2005, 10, 1828.	3.0	6
72	Muscle-Specific Deletion of Toll-like Receptor 4 Impairs Metabolic Adaptation to Wheel Running in Mice. Medicine and Science in Sports and Exercise, 2021, 53, 1161-1169.	0.4	6

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73	St. Johnâ€™s Wort Has Metabolically Favorable Effects on AdipocytesIn Vivo. Evidence-based Complementary and Alternative Medicine, 2014, 2014, 1-8.	1.2	5
74	Modulation of the malonyl-CoA sensitivity of hepatic carnitine palmitoyltransferase (CPT) by phospholipids. Biochemical Society Transactions, 1994, 22, 113S-113S.	3.4	4
75	A genetic screen identifies Crat as a regulator of pancreatic beta-cell insulin secretion. Molecular Metabolism, 2020, 37, 100993.	6.5	4
76	Female Mice Are Protected from Metabolic Decline Associated with Lack of Skeletal Muscle HuR. Biology, 2021, 10, 543.	2.8	1
77	Hepatic IKKÎµ expression is dispensable for high-fat feeding-induced increases in liver lipid content and alterations in glucose tolerance. American Journal of Physiology - Endocrinology and Metabolism, 2020, 318, E11-E21.	3.5	0
78	High fat dietâ€induced muscle insulin resistance: role of cytokines and local macrophages. FASEB Journal, 2012, 26, 364.5.	0.5	0