William I Sivitz

List of Publications by Year
in descending order

93 papers	6,912 citations	76326 40 h-index	58581 82 g-index
94 all docs	94 docs citations	94 times ranked	8800 citing authors

#	Article	IF	Citations
1	The association between symptomatic, severe hypoglycaemia and mortality in type 2 diabetes: retrospective epidemiological analysis of the ACCORD study. BMJ: British Medical Journal, 2010, 340, b4909-b4909.	2.3	807
2	Mitochondrial Dysfunction in Diabetes: From Molecular Mechanisms to Functional Significance and Therapeutic Opportunities. Antioxidants and Redox Signaling, 2010, 12, 537-577.	5.4	600
3	Glycation and Carboxymethyllysine Levels in Skin Collagen Predict the Risk of Future 10-Year Progression of Diabetic Retinopathy and Nephropathy in the Diabetes Control and Complications Trial and Epidemiology of Diabetes Interventions and Complications Participants With Type 1 Diabetes. Diabetes, 2005, 54, 3103-3111.	0.6	384
4	Interactions Between the Melanocortin System and Leptin in Control of Sympathetic Nerve Traffic. Hypertension, 1999, 33, 542-547.	2.7	349
5	CaMKII determines mitochondrial stress responses in heart. Nature, 2012, 491, 269-273.	27.8	340
6	Sympathetic and Cardiorenal Actions of Leptin. Hypertension, 1997, 30, 619-623.	2.7	276
7	Ectopic brown adipose tissue in muscle provides a mechanism for differences in risk of metabolic syndrome in mice. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2366-2371.	7.1	256
8	Regulation of glucose transporter messenger RNA in insulin-deficient states. Nature, 1989, 340, 72-74.	27.8	247
9	Effects of Leptin on Insulin Sensitivity in Normal Rats*. Endocrinology, 1997, 138, 3395-3401.	2.8	234
10	The Concept of Selective Leptin Resistance: Evidence From Agouti Yellow Obese Mice. Diabetes, 2002, 51, 439-442.	0.6	202
11	Free Fatty Acid-induced Î²-Cell Defects Are Dependent on Uncoupling Protein 2 Expression. Journal of Biological Chemistry, 2004, 279, 51049-51056.	3.4	179
12	Cellular Mechanisms of Insulin Release: The Effects of Vitamin D Deficiency and Repletion on Rat Insulin Secretion*. Endocrinology, 1983, 113, 1511-1518.	2.8	175
13	Leptin Acts in the Central Nervous System to Produce Dose-Dependent Changes in Arterial Pressure. Hypertension, 2001, 37, 936-942.	2.7	138
14	Reversibility of Fenofibrate Therapyâ€“Induced Renal Function Impairment in ACCORD Type 2 Diabetic Participants. Diabetes Care, 2012, 35, 1008-1014.	8.6	114
15	Risk Factors for Retinopathy in Type 1 Diabetes: The DCCT/EDIC Study. Diabetes Care, 2019, 42, 875-882.	8.6	114
16	Reactive Oxygen and Targeted Antioxidant Administration in Endothelial Cell Mitochondria. Journal of Biological Chemistry, 2006, 281, 39766-39775.	3.4	106
17	Pubertal Adolescent Male-Female Differences in Insulin Sensitivity and Glucose Effectiveness Determined by the One Compartment Minimal Model. Pediatric Research, 2000, 48, 384-388.	2.3	105
18	Fasting and Leptin Modulate Adipose and Muscle Uncoupling Protein: Divergent Effects Between Messenger Ribonucleic Acid and Protein Expression1. Endocrinology, 1999, 140, 1511-1519.	2.8	101

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19	Regulation of the Glucose Transporter in Developing Rat Brain*. Endocrinology, 1989, 124, 1875-1880.	2.8	77
20	Impact of Excessive Weight Gain on Cardiovascular Outcomes in Type 1 Diabetes: Results From the Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications (DCCT/EDIC) Study. Diabetes Care, 2017, 40, 1756-1762.	8.6	77
21	Mammalian Glucose Transporters: Structure and Molecular Regulation. , 1991, 47, 349-388.		66
22	UCP2-dependent Proton Leak in Isolated Mammalian Mitochondria. Journal of Biological Chemistry, 2002, 277, 3918-3925.	3.4	65
23	Superoxide and Respiratory Coupling in Mitochondria of Insulin-Deficient Diabetic Rats. Endocrinology, 2009, 150, 46-55.	2.8	64
24	Adiponectin and C-reactive protein in obesity, type 2 diabetes, and monodrug therapy. Metabolism: Clinical and Experimental, 2004, 53, 1454-1461.	3.4	62
25	Plasma leptin in diabetic and insulin-treated diabetic and normal rats. Metabolism: Clinical and Experimental, 1998, 47, 584-591.	3.4	61
26	Does Leptin Stimulate Nitric Oxide to Oppose the Effects of Sympathetic Activation?. Hypertension, 2001, 38, 1081-1086.	2.7	61
27	Leptin interacts with heart rate but not sympathetic nerve traffic in healthy male subjects. Journal of Hypertension, 2001, 19, 1089-1094.	0.5	59
28	Role of Corticotrophin-Releasing Factor in Effects of Leptin on Sympathetic Nerve Activity and Arterial Pressure. Hypertension, 2001, 38, 384-388.	2.7	59
29	Regulation of ATP production: dependence on calcium concentration and respiratory state. American Journal of Physiology - Cell Physiology, 2017, 313, C146-C153.	4.6	57
30	Obesity impairs vascular relaxation in human subjects: hyperglycemia exaggerates adrenergic vasoconstriction. Journal of Diabetes and Its Complications, 2007, 21, 149-157.	2.3	53
31	Bioenergetic Effects of Mitochondrial-Targeted Coenzyme Q Analogs in Endothelial Cells. Journal of Pharmacology and Experimental Therapeutics, 2012, 342, 709-719.	2.5	52
32	Heritability of plasma leptin levels. Journal of Hypertension, 1999, 17, 27-31.	0.5	51
33	Leptin Potentiates Thermogenic Sympathetic Responses to Hypothermia: A Receptor-Mediated Effect. Diabetes, 2002, 51, 2434-2440.	0.6	50
34	A Novel Triphenylphosphonium Carrier to Target Mitochondria without Uncoupling Oxidative Phosphorylation. Journal of Medicinal Chemistry, 2021, 64, 662-676.	6.4	50
35	Human iPS Cell-Derived Insulin Producing Cells Form Vascularized Organoids under the Kidney Capsules of Diabetic Mice. PLoS ONE, 2015, 10, e0116582.	2.5	48
36	Leptin Gene â€“2548G/A variants predict risperidone-associated weight gain in children and adolescents. Psychiatric Genetics, 2009, 19, 320-327.	1.1	47

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37	Respiratory uncoupling by UCP1 and UCP2 and superoxide generation in endothelial cell mitochondria. American Journal of Physiology - Endocrinology and Metabolism, 2005, 288, E71-E79.	3.5	45
38	Dietary fat, fatty acid saturation and mitochondrial bioenergetics. Journal of Bioenergetics and Biomembranes, 2014, 46, 33-44.	2.3	41
39	Regulation of Glucose Transporter Messenger RNA Levels in Rat Adipose Tissue by Insulin. Molecular Endocrinology, 1990, 4, 583-588.	3.7	40
40	Leptin and Body Fat in Type 2 Diabetes and Monodrug Therapy. Journal of Clinical Endocrinology and Metabolism, 2003, 88, 1543-1553.	3.6	40
41	Effect of Maternal Diabetes upon Fetal Rat Myocardial and Skeletal Muscle Glucose Transporters1. Pediatric Research, 1997, 41, 11-19.	2.3	40
42	Differential modulation of leptin-induced sympathoexcitation by baroreflex activation. Journal of Hypertension, 2002, 20, 1633-1641.	0.5	39
43	Mitochondrial proton leak in obesity-resistant and obesity-prone mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2007, 293, R1773-R1780.	1.8	39
44	A Mitochondrial-Targeted Coenzyme Q Analog Prevents Weight Gain and Ameliorates Hepatic Dysfunction in High-Fatâ€“Fed Mice. Journal of Pharmacology and Experimental Therapeutics, 2014, 351, 699-708.	2.5	39
45	Endothelial Cell and Platelet Bioenergetics: Effect of Glucose and Nutrient Composition. PLoS ONE, 2012, 7, e39430.	2.5	36
46	Antecedent Hypoglycemia, Catecholamine Depletion, and Subsequent Sympathetic Neural Responses. Endocrinology, 2006, 147, 2781-2788.	2.8	35
47	Rat Adipose ob mRNA Levels in States of Altered Circulating Glucose and Insulin. Biochemical and Biophysical Research Communications, 1996, 220, 520-525.	2.1	33
48	Cyclic Changes in Glycemia Assessed by Continuous Glucose Monitoring System During Multiple Complete Menstrual Cycles in Women with Type 1 Diabetes. Diabetes Technology and Therapeutics, 2004, 6, 473-480.	4.4	32
49	Association of Insulin Dose, Cardiometabolic Risk Factors, and Cardiovascular Disease in Type 1 Diabetes During 30 Years of Follow-up in the DCCT/EDIC Study. Diabetes Care, 2019, 42, 657-664.	8.6	32
50	Lipotoxicity and glucotoxicity in type 2 diabetes. Postgraduate Medicine, 2001, 109, 55-64.	2.0	31
51	Oxaloacetic acid mediates ADP-dependent inhibition of mitochondrial complex IIâ€“driven respiration. Journal of Biological Chemistry, 2018, 293, 19932-19941.	3.4	30
52	Mitochondrial Function in Diabetes: Novel Methodology and New Insight. Diabetes, 2013, 62, 1833-1842.	0.6	29
53	Effect of Acute and Antecedent Hypoglycemia on Sympathetic Neural Activity and Catecholamine Responsiveness in Normal Rats. Diabetes, 2001, 50, 1119-1125.	0.6	28
54	Insulin and IGF-1 receptors regulate complex Iâ€“dependent mitochondrial bioenergetics and supercomplexes via FoxOs in muscle. Journal of Clinical Investigation, 2021, 131, .	8.2	28

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55	Computer-Assisted Instruction in Intense Insulin Therapy Using a Mathematical Model for Clinical Simulation With a Clinical Algorithm and Flow Sheet. The Diabetes Educator, 1989, 15, 77-79.	2.5	26
56	Effect of a mitochondrialâ€targeted coenzyme Q analog on pancreatic Î²â€cell function and energetics in high fat fed obese mice. Pharmacology Research and Perspectives, 2018, 6, e00393.	2.4	26
57	Metabolic effects of a mitochondrial-targeted coenzyme Q analog in high fat fed obese mice. Pharmacology Research and Perspectives, 2017, 5, e00301.	2.4	22
58	Superoxide production by mitochondria of insulin-sensitive tissues: mechanistic differences and effect of early diabetes. Metabolism: Clinical and Experimental, 2010, 59, 247-257.	3.4	21
59	Peroxisome Proliferator-Activated Receptor Î³ Decouples Fatty Acid Uptake from Lipid Inhibition of Insulin Signaling in Skeletal Muscle. Molecular Endocrinology, 2012, 26, 977-988.	3.7	21
60	Adipose Triglyceride Lipase Is a Key Lipase for the Mobilization of Lipid Droplets in Human Î²-Cells and Critical for the Maintenance of Syntaxin 1a Levels in Î²-Cells. Diabetes, 2020, 69, 1178-1192.	0.6	20
61	An Observational Study of the Equivalence of Age and Duration of Diabetes to Glycemic Control Relative to the Risk of Complications in the Combined Cohorts of the DCCT/EDIC Study. Diabetes Care, 2020, 43, 2478-2484.	8.6	19
62	Effect of mitoquinone (Mito-Q) on neuropathic endpoints in an obese and type 2 diabetic rat model. Free Radical Research, 2020, 54, 311-318.	3.3	19
63	Assessment of Glucose Transporter Gene Expression Using the Polymerase Chain Reaction. Endocrinology, 1991, 128, 2387-2394.	2.8	18
64	Mitochondrial Targeted Coenzyme Q, Superoxide, and Fuel Selectivity in Endothelial Cells. PLoS ONE, 2009, 4, e4250.	2.5	18
65	Hemodynamic consequences of neuropeptide Y-induced obesity. American Journal of Hypertension, 2002, 15, 137-142.	2.0	15
66	Modulation of complex IIâ€energized respiration in muscle, heart, and brown adipose mitochondria by oxaloacetate and complex I electron flow. FASEB Journal, 2019, 33, 11696-11705.	0.5	15
67	Uncoupling Metabolism and Coupling Leptin to Cardiovascular Disease. Arteriosclerosis, Thrombosis, and Vascular Biology, 2002, 22, 881-883.	2.4	14
68	Scintigraphic Detection of Benign Struma Ovarii in a Hyperthyroid Patient. Journal of Clinical Endocrinology and Metabolism, 2005, 90, 3771-3772.	3.6	14
69	Mitochondrial superoxide and coenzyme Q in insulin-deficient rats: increased electron leak. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2011, 301, R1616-R1624.	1.8	14
70	Optimization of Metformin in the GRADE Cohort: Effect on Glycemia and Body Weight. Diabetes Care, 2020, 43, 940-947.	8.6	14
71	Voltage-Dependent Regulation of Complex II Energized Mitochondrial Oxygen Flux. PLoS ONE, 2016, 11, e0154982.	2.5	13
72	Time-dependent regulation of rat adipose tissue glucose transporter (GLUT4) mRNA and protein by insulin in streptozocin-diabetic and normal rats. Metabolism: Clinical and Experimental, 1992, 41, 1267-1272.	3.4	12

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73	Endogenous Peroxisome Proliferator-Activated Receptor-Î³ Augments Fatty Acid Uptake in Oxidative Muscle. Endocrinology, 2008, 149, 5374-5383.	2.8	12
74	Perilipin 2 downregulation in Î² cells impairs insulin secretion under nutritional stress and damages mitochondria. JCI Insight, 2021, 6, .	5.0	10
75	Simultaneous Quantification of Mitochondrial ATP and ROS Production. Methods in Molecular Biology, 2015, 1264, 149-159.	0.9	10
76	Joiner et al. reply. Nature, 2014, 513, E3-E3.	27.8	9
77	Impaired utilization of membrane potential by complex II-energized mitochondria of obese, diabetic mice assessed using ADP recycling methodology. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 311, R756-R763.	1.8	7
78	Effect of mitoquinone on liver metabolism and steatosis in obese and diabetic rats. Pharmacology Research and Perspectives, 2021, 9, e00701.	2.4	7
79	Oxaloacetate Mediates Mitochondrial Metabolism and Function. Current Metabolomics and Systems Biology, 2020, 7, 11-23.	0.6	5
80	Understanding insulin resistance. Postgraduate Medicine, 2004, 116, 41-48.	2.0	4
81	Evidence for metabolic aberrations in asymptomatic persons with type 2 diabetes after initiation of simvastatin therapy. Translational Research, 2015, 166, 176-187.	5.0	4
82	Regulation of the Glucose Transporter in Animal Models of Diabetes. Advances in Experimental Medicine and Biology, 1991, 293, 249-262.	1.6	4
83	Membrane potentialâ€dependent regulation of mitochondrial complex II by oxaloacetate in interscapular brown adipose tissue. FASEB BioAdvances, 2022, 4, 197-210.	2.4	4
84	Leptin administration to normal rats does not alter catecholamine responsiveness to insulin-induced hypoglycemia. Metabolism: Clinical and Experimental, 2003, 52, 1484-1490.	3.4	3
85	Feeding Frequency and Appetite in Lean and Obese Prepubertal Children. Obesity, 2011, 19, 560-567.	3.0	3
86	Case Report: Renal Hypophosphatemic Osteomalacia Unmasked by Hyperthyroidism. American Journal of the Medical Sciences, 1986, 292, 231-234.	1.1	1
87	Techniques to Investigate Bioenergetics of Mitochondria. Neuromethods, 2017, , 67-94.	0.3	1
88	Mitochondria and Oxidative Stress in Diabetes. Oxidative Stress in Applied Basic Research and Clinical Practice, 2014, , 63-92.	0.4	0
89	Response to Comment on Braffett et al. Association of Insulin Dose, Cardiometabolic Risk Factors, and Cardiovascular Disease in Type 1 Diabetes During 30 Years of Follow-up in the DCCT/EDIC Study. Diabetes Care 2019;42:657â€“664. Diabetes Care, 2019, 42, e137-e137.	8.6	0
90	Adipose Triglyceride Lipase is a Key Lipase for the Mobilization of Lipid Droplets in Human Beta Cells and Critical for the Maintenance of Syntaxin1a Level in Beta Cells. Diabetes, 2020, , db190951.	0.6	0

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91	Simultaneous Quantification of Mitochondrial ATP and Using ATP Methodology. Methods in Molecular Biology, 2021, 2276, 271-283.	0.9	0
92	Modifying a high saturated fat diet with omegaâ€3 (nâ€3) polyâ€unsaturated fat improves vascular dysfunction and glucose intolerance. FASEB Journal, 2012, 26, 686.13.	0.5	0
93	Modifying a high fat diet with monoâ€and polyâ€unsaturated fats improves coronary dysfunction. FASEB Journal, 2012, 26, 1055.7.	0.5	0