Isabelle Leclerc

List of Publications by Year
in descending order

70	3,217	147801 31	155660 55
papers	citations	h-index	g-index

84	84	84	4023
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Roles of 5â€²-AMP-activated protein kinase (AMPK) in mammalian glucose homoeostasis. Biochemical Journal, 2003, 375, 1-16.	3.7	310
2	Role for AMP-activated protein kinase in glucose-stimulated insulin secretion and preproinsulin gene expression. Biochemical Journal, 2003, 371, 761-774.	3.7	253
3	Role of AMP-activated protein kinase in the regulation by glucose of islet beta cell gene expression. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 4023-4028.	7.1	195
4	Loss of Brain Volume in Endogenous Cushingâ€™s Syndrome and Its Reversibility after Correction of Hypercortisolism. Journal of Clinical Endocrinology and Metabolism, 2002, 87, 1949-1954.	3.6	175
5	Metformin, but not leptin, regulates AMP-activated protein kinase in pancreatic islets: impact on glucose-stimulated insulin secretion. American Journal of Physiology - Endocrinology and Metabolism, 2004, 286, E1023-E1031.	3.5	150
6	Leader Î²-cells coordinate Ca2+ dynamics across pancreatic islets in vivo. Nature Metabolism, 2019, 1, 615-629.	11.9	128
7	Impaired glucose homeostasis in transgenic mice expressing the human transient neonatal diabetes mellitus locus, TNDM. Journal of Clinical Investigation, 2004, 114, 339-348.	8.2	126
8	The 5â€²-AMP-activated protein kinase inhibits the transcriptional stimulation by glucose in liver cells, acting through the glucose response complex. FEBS Letters, 1998, 431, 180-184.	2.8	123
9	Ablation of AMP-activated protein kinase Î±1 and Î±2 from mouse pancreatic beta cells and RIP2.Cre neurons suppresses insulin release in vivo. Diabetologia, 2010, 53, 924-936.	6.3	99
10	Over-expression of sterol-regulatory-element-binding protein-1c (SREBP1c) in rat pancreatic islets induces lipogenesis and decreases glucose-stimulated insulin release: modulation by 5-aminoimidazole-4-carboxamide ribonucleoside (AICAR). Biochemical Journal, 2004, 378, 769-778.	3.7	97
11	5â€²-AMP-activated Protein Kinase Controls Insulin-containing Secretory Vesicle Dynamics. Journal of Biological Chemistry, 2003, 278, 52042-52051.	3.4	94
12	Over-expression of AMP-activated protein kinase impairs pancreatic Î²-cell function in vivo. Journal of Endocrinology, 2005, 187, 225-235.	2.6	90
13	Stimulation of AMP-Activated Protein Kinase Is Essential for the Induction of Drug Metabolizing Enzymes by Phenobarbital in Human and Mouse Liver. Molecular Pharmacology, 2006, 70, 1925-1934.	2.3	84
14	AMP-Activated Protein Kinase: A New Beta-Cell Glucose Sensor?: Regulation by Amino Acids and Calcium Ions. Diabetes, 2004, 53, S67-S74.	0.6	78
15	Impaired glucose homeostasis in transgenic mice expressing the human transient neonatal diabetes mellitus locus, TNDM. Journal of Clinical Investigation, 2004, 114, 339-348.	8.2	77
16	ChREBP binding to fatty acid synthase and L-type pyruvate kinase genes is stimulated by glucose in pancreatic Î²-cells. Journal of Lipid Research, 2006, 47, 2482-2491.	4.2	76
17	Hypothalamic AMP-Activated Protein Kinase Regulates Glucose Production. Diabetes, 2010, 59, 2435-2443.	0.6	74
18	The AMP-regulated kinase family: Enigmatic targets for diabetes therapy. Molecular and Cellular Endocrinology, 2009, 297, 41-49.	3.2	69

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19	LKB1 deletion with the RIP2.Cre transgene modifies pancreatic Î²-cell morphology and enhances insulin secretion in vivo. American Journal of Physiology - Endocrinology and Metabolism, 2010, 298, E1261-E1273.	3.5	63
20	Carbohydrate-Responsive Element-Binding Protein (ChREBP) Is a Negative Regulator of ARNT/HIF-1Î² Gene Expression in Pancreatic Islet Î²-Cells. Diabetes, 2010, 59, 153-160.	0.6	61
21	Decreased STARD10 Expression Is Associated with Defective Insulin Secretion in Humans and Mice. American Journal of Human Genetics, 2017, 100, 238-256.	6.2	60
22	AMP-activated protein kinase regulates glucagon secretion from mouse pancreatic alpha cells. Diabetologia, 2011, 54, 125-134.	6.3	54
23	Glucose-Induced Nuclear Shuttling of ChREBP Is Mediated by Sorcin and Ca2+ Ions in Pancreatic Î²-Cells. Diabetes, 2012, 61, 574-585.	0.6	52
24	Local and regional control of calcium dynamics in the pancreatic islet. Diabetes, Obesity and Metabolism, 2017, 19, 30-41.	4.4	49
25	The transcription factor Pax6 is required for pancreatic Î² cell identity, glucose-regulated ATP synthesis, and Ca2+ dynamics in adult mice. Journal of Biological Chemistry, 2017, 292, 8892-8906.	3.4	48
26	Sorcin Links Pancreatic Î²-Cell Lipotoxicity to ER Ca2+ Stores. Diabetes, 2016, 65, 1009-1021.	0.6	45
27	MiRâ€184 expression is regulated by AMPK in pancreatic islets. FASEB Journal, 2018, 32, 2587-2600.	0.5	39
28	The pore-forming subunit MCU of the mitochondrial Ca2+ uniporter is required for normal glucose-stimulated insulin secretion in vitro and in vivo in mice. Diabetologia, 2020, 63, 1368-1381.	6.3	37
29	Expression of COUP-TFII in metabolic tissues during development. Mechanisms of Development, 2002, 119, 109-114.	1.7	35
30	Remote control of glucose homeostasis in vivo using photopharmacology. Scientific Reports, 2017, 7, 291.	3.3	33
31	Impact of Adenoviral Transduction With SREBP1c or AMPK on Pancreatic Islet Gene Expression Profile: Analysis With Oligonucleotide Microarrays. Diabetes, 2004, 53, S84-S91.	0.6	32
32	ChREBP regulates Pdx-1 and other glucose-sensitive genes in pancreatic Î²-cells. Biochemical and Biophysical Research Communications, 2010, 402, 252-257.	2.1	23
33	RIP2-mediated LKB1 deletion causes axon degeneration in the spinal cord and hind-limb paralysis. DMM Disease Models and Mechanisms, 2011, 4, 193-202.	2.4	23
34	The type 2 diabetes gene product STARD10 is a phosphoinositide-binding protein that controls insulin secretory granule biogenesis. Molecular Metabolism, 2020, 40, 101015.	6.5	22
35	The relationship between p38 mitogen-activated protein kinase and AMP-activated protein kinase during myocardial ischemia. Cardiovascular Research, 2007, 76, 465-472.	3.8	21
36	Transcription factor-7â€“like 2 (TCF7L2) gene acts downstream of the Lkb1/Stk11 kinase to control mTOR signaling, Î² cell growth, and insulin secretion. Journal of Biological Chemistry, 2018, 293, 14178-14189.	3.4	19

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37	Control of insulin granule dynamics by AMPK dependent KLC1 phosphorylation. Islets, 2009, 1, 198-209.	1.8	17
38	Adipocyte-specific deletion of Tcf7l2 induces dysregulated lipid metabolism and impairs glucose tolerance in mice. Diabetologia, 2021, 64, 129-141.	6.3	17
39	Intravital imaging of islet Ca2+ dynamics reveals enhanced Î² cell connectivity after bariatric surgery in mice. Nature Communications, 2021, 12, 5165.	12.8	17
40	Role of AMP-activated protein kinase in the regulation of gene transcription. Biochemical Society Transactions, 2002, 30, 307-311.	3.4	15
41	AMP- and stress-activated protein kinases: Key regulators of glucose-dependent gene transcription in mammalian cells?. Progress in Molecular Biology and Translational Science, 2002, 71, 69-90.	1.9	15
42	Mitofusins Mfn1 and Mfn2 Are Required to Preserve Glucose- but Not Incretin-Stimulated Î²-Cell Connectivity and Insulin Secretion. Diabetes, 2022, 71, 1472-1489.	0.6	14
43	No change in glucose tolerance and substrate oxidation after a high-carbohydrate, low-fat diet. Metabolism: Clinical and Experimental, 1993, 42, 365-370.	3.4	11
44	Cell-wide analysis of secretory granule dynamics in three dimensions in living pancreatic Î²-cells: evidence against a role for AMPK-dependent phosphorylation of KLC1 at Ser517/Ser520 in glucose-stimulated insulin granule movement. Biochemical Society Transactions, 2010, 38, 205-208.	3.4	11
45	Roles of Ca2+ ions in the control of ChREBP nuclear translocation. Journal of Endocrinology, 2012, 213, 115-122.	2.6	10
46	Glucose-Dependent miR-125b Is a Negative Regulator of Î²-Cell Function. Diabetes, 2022, 71, 1525-1545.	0.6	10
47	Sexually dimorphic roles for the type 2 diabetes-associated C2cd4b gene in murine glucose homeostasis. Diabetologia, 2021, 64, 850-864.	6.3	7
48	Synthesis and in vivo behaviour of an exendin-4-based MRI probe capable of Î²-cell-dependent contrast enhancement in the pancreas. Dalton Transactions, 2020, 49, 4732-4740.	3.3	5
49	Imaging Glucose-Regulated Insulin Secretion and Gene Expression in Single Islet Î²-Cells: Control by AMP-Activated Protein Kinase. Cell Biochemistry and Biophysics, 2004, 40, 179-190.	1.8	5
50	The Ca 2+ â€‰binding protein sorcin stimulates transcriptional activity of the unfolded protein response mediator ATF6. FEBS Letters, 2021, 595, 1782-1796.	2.8	4
51	Manipulation and Measurement of AMPK Activity in Pancreatic Islets. Methods in Molecular Biology, 2018, 1732, 413-431.	0.9	4
52	2183-P: miR-125b Is Regulated by Glucose via AMPK and Impairs ÃŸ-Cell Function. Diabetes, 2019, 68, .	0.6	4
53	Opposing effects on regulated insulin secretion of acute vs chronic stimulation of AMP-activated protein kinase. Diabetologia, 2022, 65, 997-1011.	6.3	4
54	Present and potential future use of gene therapy for the treatment of non-insulin dependent diabetes mellitus (Review).. International Journal of Molecular Medicine, 1999, 4, 585-92.	4.0	3

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55	Vertical Sleeve Gastrectomy Lowers SGLT2/Slc5a2 Expression in the Mouse Kidney. Diabetes, 2022, 71, 1623-1635.	0.6	2
56	Real-Time In Vivo Imaging of Whole Islet Ca2+ Dynamics Reveals Glucose-Induced Changes in Beta-Cell Connectivity in Mouse and Human Islets. Diabetes, 2018, 67, 249-LB.	0.6	1
57	The relationship between P38â€“MAPK and AMPK during myocardial ischaemia. Journal of Molecular and Cellular Cardiology, 2007, 42, S52.	1.9	0
58	Glucose regulates miR-184 via AMP-activated protein kinase (AMPK) in pancreatic [beta]-cells. Endocrine Abstracts, 0, , .	0.0	0
59	2173-P: Effects of AMP-Activated Protein Kinase Activation on Insulin Secretion in Mice. Diabetes, 2019, 68, .	0.6	0
60	343-LB: The Type 2 Diabetes-Associated Lipid Binding Protein STARD10 Controls Insulin Secretory Granule Biogenesis. Diabetes, 2019, 68, .	0.6	0
61	42-OR: Hub Cells Orchestrate 3-Dimensional Pancreatic Beta-Cell Ca2+ Dynamics In Vivo. Diabetes, 2019, 68, 42-OR.	0.6	0
62	161-LB: Inhibition of Kidney SGLT2 Expression following Bariatric Surgery in Mice. Diabetes, 2019, 68, 161-LB.	0.6	0
63	Metabolic surgery reduces kidney SGLT2 expression in mice. Endocrine Abstracts, 0, , .	0.0	0
64	Modulation of EGFR expression to increase islet transplantation success. Endocrine Abstracts, 0, , .	0.0	0
65	1683-P: Upregulation of Pancreatic Islet EGF Receptor Improves Beta-Cell Identity and In Vivo Vascularisation in a Directly Observed Transplant Model. Diabetes, 2020, 69, 1683-P.	0.6	0
66	1912-P: Bariatric Surgery Downregulates Glucocorticoid Signaling in Mice. Diabetes, 2020, 69, .	0.6	0
67	2100-P: Binding Kinetics, GLP-1 Receptor Internalization, and Effects on Insulin Secretion for GL0034 and Related GLP-1R Agonists. Diabetes, 2020, 69, .	0.6	0
68	320-OR: Bariatric Surgery Improves Ca2+ Dynamics across Pancreatic Islets In Vivo. Diabetes, 2020, 69, 320-OR.	0.6	0
69	2072-P: Deletion of the Mitofusins 1 and 2 (Mfn1 and Mfn2) in the Pancreatic Beta Cell Disrupts Mitochondrial Structure and Function In Vitro and Strongly Impairs Glucose-Stimulated Insulin Secretion In Vivo. Diabetes, 2020, 69, 2072-P.	0.6	0
70	1798-P: Chronic Administration of a Long-Acting Glucagon Analogue Results in Enhanced Insulin Secretory Activity in a Directly-Observed Murine Model. Diabetes, 2020, 69, 1798-P.	0.6	0