Patrick Gilon

List of Publications by Year in Descending Order

51 papers	2,828 citations	28 h-index	52 g-index
52 ext. papers	3,191 ext. citations	5.8 avg, IF	5.03 L-index

#	Paper	IF	Citations
51	Glucose inhibits glucagon secretion by decreasing [Ca] and by reducing the efficacy of Ca on exocytosis via somatostatin-dependent and independent mechanisms.. *Molecular Metabolism*, **2022**, 101495	8.8	0
50	LDHA is enriched in human islet alpha cells and upregulated in type 2 diabetes. *Biochemical and Biophysical Research Communications*, **2021**, 568, 158-166	3.4	1
49	K channel blockers control glucagon secretion by distinct mechanisms: A direct stimulation of cells involving a [Ca] rise and an indirect inhibition mediated by somatostatin. *Molecular Metabolism*, **2021**, 53, 101268	8.8	4
48	The Role of Cells in Islet Function and Glucose Homeostasis in Health and Type 2 Diabetes. *Journal of Molecular Biology*, **2020**, 432, 1367-1394	6.5	21
47	Inhibition of aquaporin-1 prevents myocardial remodeling by blocking the transmembrane transport of hydrogen peroxide. *Science Translational Medicine*, **2020**, 12,	17.5	18
46	SGLT2 is not expressed in pancreatic and cells, and its inhibition does not directly affect glucagon and insulin secretion in rodents and humans. *Molecular Metabolism*, **2020**, 42, 101071	8.8	13
45	Hydroxybutyrate does not mediate glucose inhibition of glucagon secretion. *Journal of Biological Chemistry*, **2020**, 295, 5419-5426	5.4	1
44	Glucose Acutely Reduces Cytosolic and Mitochondrial HO in Rat Pancreatic Beta Cells. *Antioxidants and Redox Signaling*, **2019**, 30, 297-313	8.4	10
43	Metallothionein 1 negatively regulates glucose-stimulated insulin secretion and is differentially expressed in conditions of beta cell compensation and failure in mice and humans. *Diabetologia*, **2019**, 62, 2273-2286	10.3	5
42	Somatostatin Is Only Partly Required for the Glucagonostatic Effect of Glucose but Is Necessary for the Glucagonostatic Effect of K Channel Blockers. *Diabetes*, **2018**, 67, 2239-2253	0.9	23
41	Impaired Store-Operated Calcium Entry and STIM1 Loss Lead to Reduced Insulin Secretion and Increased Endoplasmic Reticulum Stress in the Diabetic Cell. *Diabetes*, **2018**, 67, 2293-2304	0.9	28
40	Sodium-myoinositol cotransporter-1, SMIT1, mediates the production of reactive oxygen species induced by hyperglycemia in the heart. *Scientific Reports*, **2017**, 7, 41166	4.9	43
39	Steviol glycosides enhance pancreatic beta-cell function and taste sensation by potentiation of TRPM5 channel activity. *Nature Communications*, **2017**, 8, 14733	17.4	88
38	TALK-1 channels control cell endoplasmic reticulum Ca homeostasis. *Science Signaling*, **2017**, 10,	8.8	17
37	Identification of islet-enriched long non-coding RNAs contributing to cell failure in type 2 diabetes. *Molecular Metabolism*, **2017**, 6, 1407-1418	8.8	41
36	How stable is repression of disallowed genes in pancreatic islets in response to metabolic stress?. *PLoS ONE*, **2017**, 12, e0181651	3.7	11
35	Paracrine nitric oxide induces expression of cardiac sarcomeric proteins in adult progenitor cells through soluble guanylyl cyclase/cyclic-guanosine monophosphate and Wnt/catenin inhibition. *Cardiovascular Research*, **2016**, 112, 478-90	9.9	3

34	Cocaine- and amphetamine-regulated transcript: a novel regulator of energy homeostasis expressed in a subpopulation of pancreatic islet cells. *Diabetologia*, **2016**, 59, 1855-9	10.3	8
33	Inter-domain tagging implicates caveolin-1 in insulin receptor trafficking and Erk signaling bias in pancreatic beta-cells. *Molecular Metabolism*, **2016**, 5, 366-378	8.8	27
32	SERCA2 Deficiency Impairs Pancreatic Cell Function in Response to Diet-Induced Obesity. *Diabetes*, **2016**, 65, 3039-52	0.9	42
31	Physiological and Pathophysiological Control of Glucagon Secretion by Pancreatic Cells **2015**, 175-247		1
30	Can Tea Extracts Exert a Protective Effect Against Diabetes by Reducing Oxidative Stress and Decreasing Glucotoxicity in Pancreatic Cells?. *Diabetes and Metabolism Journal*, **2015**, 39, 27-30	5	4
29	Calcium signaling in pancreatic cells in health and in Type 2 diabetes. *Cell Calcium*, **2014**, 56, 340-61	4	125
28	AMPK activation by glucagon-like peptide-1 prevents NADPH oxidase activation induced by hyperglycemia in adult cardiomyocytes. *American Journal of Physiology - Heart and Circulatory Physiology*, **2014**, 307, H1120-33	5.2	85
27	Pancreatic and duodenal homeobox protein 1 (Pdx-1) maintains endoplasmic reticulum calcium levels through transcriptional regulation of sarco-endoplasmic reticulum calcium ATPase 2b (SERCA2b) in the islet cell. *Journal of Biological Chemistry*, **2014**, 289, 32798-810	5.4	28
26	Glucose regulation of glucagon secretion. *Diabetes Research and Clinical Practice*, **2014**, 103, 1-10	7.4	70
25	Physiological and Pathophysiological Control of Glucagon Secretion by Pancreatic Cells **2014**, 1-69		2
24	In situ electrophysiological examination of pancreatic cells in the streptozotocin-induced diabetes model, revealing the cellular basis of glucagon hypersecretion. *Diabetes*, **2013**, 62, 519-30	0.9	39
23	Frequency-dependent mitochondrial Ca(2+) accumulation regulates ATP synthesis in pancreatic cells. *Pflugers Archiv European Journal of Physiology*, **2013**, 465, 543-54	4.6	59
22	UCP2 regulates the glucagon response to fasting and starvation. *Diabetes*, **2013**, 62, 1623-33	0.9	56
21	Tolbutamide controls glucagon release from mouse islets differently than glucose: involvement of K(ATP) channels from both cells and cells. *Diabetes*, **2013**, 62, 1612-22	0.9	69
20	The mitochondrial Ca2+ uniporter MCU is essential for glucose-induced ATP increases in pancreatic cells. *PLoS ONE*, **2012**, 7, e39722	3.7	122
19	Tissue-specific disallowance of housekeeping genes: the other face of cell differentiation. *Genome Research*, **2011**, 21, 95-105	9.7	143
18	Mechanisms of control of the free Ca2+ concentration in the endoplasmic reticulum of mouse pancreatic cells: interplay with cell metabolism and [Ca2+]c and role of SERCA2b and SERCA3. *Diabetes*, **2011**, 60, 2533-45	0.9	67
17	Loss of high-frequency glucose-induced Ca2+ oscillations in pancreatic islets correlates with impaired glucose tolerance in Trpm5-/- mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 5208-13	11.5	150

16	Glucose and pharmacological modulators of ATP-sensitive K+ channels control [Ca2+]c by different mechanisms in isolated mouse alpha-cells. *Diabetes*, **2009**, 58, 412-21	0.9	61
15	NALCN: a regulated leak channel. *EMBO Reports*, **2009**, 10, 963-4	6.5	18
14	The GluCre-ROSA26EYFP mouse: a new model for easy identification of living pancreatic alpha-cells. *FEBS Letters*, **2007**, 581, 4235-40	3.8	68
13	Glucose-induced mixed [Ca2+]c oscillations in mouse beta-cells are controlled by the membrane potential and the SERCA3 Ca2+-ATPase of the endoplasmic reticulum. *American Journal of Physiology - Cell Physiology*, **2006**, 290, C1503-11	5.4	88
12	Atypical Ca2+-induced Ca2+ release from a sarco-endoplasmic reticulum Ca2+-ATPase 3-dependent Ca2+ pool in mouse pancreatic beta-cells. *Journal of Physiology*, **2004**, 559, 141-56	3.9	26
11	Contribution of the endoplasmic reticulum to the glucose-induced [Ca(2+)](c) response in mouse pancreatic islets. *American Journal of Physiology - Endocrinology and Metabolism*, **2002**, 282, E982-91	6	40
10	Control mechanisms of the oscillations of insulin secretion in vitro and in vivo. *Diabetes*, **2002**, 51 Suppl 1, S144-51	0.9	129
9	Feedback control of the ATP-sensitive K(+) current by cytosolic Ca(2+) contributes to oscillations of the membrane potential in pancreatic beta-cells. *Diabetes*, **2002**, 51, 376-84	0.9	48
8	SERCA3 ablation does not impair insulin secretion but suggests distinct roles of different sarcoendoplasmic reticulum Ca(2+) pumps for Ca(2+) homeostasis in pancreatic beta-cells. *Diabetes* , **2002**, 51, 3245-53	0.9	75
7	Mechanisms and physiological significance of the cholinergic control of pancreatic beta-cell function. *Endocrine Reviews*, **2001**, 22, 565-604	27.2	397
6	Uptake and release of Ca2+ by the endoplasmic reticulum contribute to the oscillations of the cytosolic Ca2+ concentration triggered by Ca2+ influx in the electrically excitable pancreatic B-cell. *Journal of Biological Chemistry*, **1999**, 274, 20197-205	5.4	101
5	Influence of cell number on the characteristics and synchrony of Ca2+ oscillations in clusters of mouse pancreatic islet cells. *Journal of Physiology*, **1999**, 520 Pt 3, 839-49	3.9	93
4	Okadaic acid-induced decrease in the magnitude and efficacy of the Ca2+ signal in pancreatic beta cells and inhibition of insulin secretion. *British Journal of Pharmacology*, **1998**, 123, 97-105	8.6	22
3	Interplay between cytoplasmic Ca2+ and the ATP/ADP ratio: a feedback control mechanism in mouse pancreatic islets. *Biochemical Journal*, **1998**, 333 (Pt 2), 269-74	3.8	147
2	Emptying of intracellular Ca2+ stores stimulates Ca2+ entry in mouse pancreatic beta-cells by both direct and indirect mechanisms. *Journal of Physiology*, **1997**, 503 (Pt 2), 387-98	3.9	72
1	Immunocytochemical localisation of GABA in endocrine cells of the rat entero-pancreatic system. *Biology of the Cell*, **1988**, 62, 265-273	3.5	19