Guy A Rutter

List of Publications by Year
in descending order

336 papers	21,013 citations	7096 78 h-index	16650 123 g-index
369 all docs	369 docs citations	369 times ranked	22455 citing authors

#	Article	IF	Citations
1	Initiation and execution of lipotoxic ER stress in pancreatic Î²-cells. Journal of Cell Science, 2008, 121, 2308-2318.	2.0	512
2	The Role of Oxidative Stress and Hypoxia in Pancreatic Beta-Cell Dysfunction in Diabetes Mellitus. Antioxidants and Redox Signaling, 2017, 26, 501-518.	5.4	433
3	Genetically encoded FRET sensors to monitor intracellular Zn2+ homeostasis. Nature Methods, 2009, 6, 737-740.	19.0	395
4	Beta Cell Hubs Dictate Pancreatic Islet Responses toÂGlucose. Cell Metabolism, 2016, 24, 389-401.	16.2	370
5	Insulin Storage and Glucose Homeostasis in Mice Null for the Granule Zinc Transporter ZnT8 and Studies of the Type 2 Diabetesâ€"Associated Variants. Diabetes, 2009, 58, 2070-2083.	0.6	347
6	MicroRNA-124a Regulates Foxa2 Expression and Intracellular Signaling in Pancreatic Î²-Cell Lines. Journal of Biological Chemistry, 2007, 282, 19575-19588.	3.4	318
7	Metformin activates a duodenal Ampkâ€"dependent pathway to lower hepatic glucose production in rats. Nature Medicine, 2015, 21, 506-511.	30.7	313
8	Mitochondrial calcium as a key regulator of mitochondrial ATP production in mammalian cells. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 1324-1333.	1.0	311
9	Roles of 5â€²-AMP-activated protein kinase (AMPK) in mammalian glucose homoeostasis. Biochemical Journal, 2003, 375, 1-16.	3.7	310
10	Pancreatic Î²-cell identity, glucose sensing and the control of insulin secretion. Biochemical Journal, 2015, 466, 203-218.	3.7	299
11	Glucose Generates Sub-plasma Membrane ATP Microdomains in Single Islet Î²-Cells. Journal of Biological Chemistry, 1999, 274, 13281-13291.	3.4	293
12	Regulation of ATP production by mitochondrial Ca2+. Cell Calcium, 2012, 52, 28-35.	2.4	262
13	Role for AMP-activated protein kinase in glucose-stimulated insulin secretion and preproinsulin gene expression. Biochemical Journal, 2003, 371, 761-774.	3.7	253
14	Glucose or Insulin, but not Zinc Ions, Inhibit Glucagon Secretion From Mouse Pancreatic Â-Cells. Diabetes, 2005, 54, 1789-1797.	0.6	247
15	miR-29a and miR-29b Contribute to Pancreatic Î²-Cell-Specific Silencing of Monocarboxylate Transporter 1 (Mct1). Molecular and Cellular Biology, 2011, 31, 3182-3194.	2.3	245
16	Physical Exerciseâ€"Induced Hypoglycemia Caused by Failed Silencing of Monocarboxylate Transporter 1 in Pancreatic Î² Cells. American Journal of Human Genetics, 2007, 81, 467-474.	6.2	213
17	Cytoplasmic dynein regulates the subcellular distribution of mitochondria by controlling the recruitment of the fission factor dynamin-related protein-1. Journal of Cell Science, 2004, 117, 4389-4400.	2.0	208
18	Lipotoxicity disrupts incretin-regulated human Î² cell connectivity. Journal of Clinical Investigation, 2013, 123, 4182-4194.	8.2	203

#	Article	IF	Citations
19	Multiple Forms of â€œKiss-and-Runâ€•Exocytosis Revealed by Evanescent Wave Microscopy. Current Biology, 2003, 13, 563-567.	3.9	194
20	Regulation of mitochondrial metabolism by ER Ca 2+ release: an intimate connection. Trends in Biochemical Sciences, 2000, 25, 215-221.	7.5	192
21	Expanding role of AMPK in endocrinology. Trends in Endocrinology and Metabolism, 2006, 17, 205-215.	7.1	190
22	Dense core secretory vesicles revealed as a dynamic Ca2+store in neuroendocrine cells with a vesicle-associated membrane protein aequorin chimaera. Journal of Cell Biology, 2001, 155, 41-52.	5.2	188
23	TCF7L2 Regulates Late Events in Insulin Secretion From Pancreatic Islet Î²-Cells. Diabetes, 2009, 58, 894-905.	0.6	185
24	Glucagon-like peptide-1 mobilizes intracellular Ca2+ and stimulates mitochondrial ATP synthesis in pancreatic MIN6 beta-cells. Biochemical Journal, 2003, 369, 287-299.	3.7	179
25	Mechanisms of Dense Core Vesicle Recapture following â€œKiss and Runâ€•(â€œCavicaptureâ€) Exocytosis in Insulin-secreting Cells. Journal of Biological Chemistry, 2004, 279, 47115-47124.	3.4	178
26	Dynamic imaging of free cytosolic ATP concentration during fuel sensing by rat hypothalamic neurones: evidence for ATPâ€independent control of ATPâ€sensitive K+channels. Journal of Physiology, 2002, 544, 429-445.	2.9	173
27	Nutrientâ€“secretion coupling in the pancreatic islet Î²-cell: recent advances. Molecular Aspects of Medicine, 2001, 22, 247-284.	6.4	165
28	Ryanodine Receptor Type I and Nicotinic Acid Adenine Dinucleotide Phosphate Receptors Mediate Ca2+ Release from Insulin-containing Vesicles in Living Pancreatic Î²-Cells (MIN6). Journal of Biological Chemistry, 2003, 278, 11057-11064.	3.4	163
29	Targeting GLP-1 receptor trafficking to improve agonist efficacy. Nature Communications, 2018, 9, 1602.	12.8	162
30	Calcium signaling in pancreatic Î²-cells in health and in Type 2 diabetes. Cell Calcium, 2014, 56, 340-361.	2.4	158
31	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
32	Myosin Va Transports Dense Core Secretory Vesicles in Pancreatic MIN6 Î²-Cells. Molecular Biology of the Cell, 2005, 16, 2670-2680.	2.1	150
33	The Mitochondrial Ca2+ Uniporter MCU Is Essential for Glucose-Induced ATP Increases in Pancreatic Î²-Cells. PLoS ONE, 2012, 7, e39722.	2.5	146
34	Identification of genes selectively disallowed in the pancreatic islet. Islets, 2010, 2, 89-95.	1.8	140
35	Involvement of conventional kinesin in glucose-stimulated secretory granule movements and exocytosis in clonal pancreatic Î²-cells. Journal of Cell Science, 2002, 115, 4177-4189.	2.0	137
36	Secretory-granule dynamics visualized in vivo with a phogrinâ€“green fluorescent protein chimaera. Biochemical Journal, 1998, 333, 193-199.	3.7	135

#	ARTICLE	IF	CITATIONS
37	Imaging dynamic insulin release using a fluorescent zinc indicator for monitoring induced exocytotic release (ZIMIR). Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 21063-21068.	7.1	133
38	Insulin Gene Mutations Resulting in Early-Onset Diabetes: Marked Differences in Clinical Presentation, Metabolic Status, and Pathogenic Effect Through Endoplasmic Reticulum Retention. Diabetes, 2010, 59, 653-661.	0.6	132
39	Simultaneous evanescent wave imaging of insulin vesicle membrane and cargo during a single exocytotic event. Current Biology, 2000, 10, 1307-1310.	3.9	131
40	Zinc and diabetes. Archives of Biochemistry and Biophysics, 2016, 611, 79-85.	3.0	131
41	Systems biology of the IMIDIA biobank from organ donors and pancreatectomised patients defines a novel transcriptomic signature of islets from individuals with type 2 diabetes. Diabetologia, 2018, 61, 641-657.	6.3	131
42	Class II Phosphoinositide 3-Kinase Regulates Exocytosis of Insulin Granules in Pancreatic Î² Cells. Journal of Biological Chemistry, 2011, 286, 4216-4225.	3.4	130
43	Leader Î²-cells coordinate Ca2+ dynamics across pancreatic islets in vivo. Nature Metabolism, 2019, 1, 615-629.	11.9	128
44	Glucose-Stimulated Oscillations in Free Cytosolic ATP Concentration Imaged in Single Islet Â-Cells: Evidence for a Ca2+-Dependent Mechanism. Diabetes, 2002, 51, S162-S170.	0.6	127
45	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
46	ADCY5 Couples Glucose to Insulin Secretion in Human Islets. Diabetes, 2014, 63, 3009-3021.	0.6	124
47	Dynamic Changes in Cytosolic and Mitochondrial ATP Levels in Pancreatic Acinar Cells. Gastroenterology, 2010, 138, 1976-1987.e5.	1.3	120
48	Rfx6 Maintains the Functional Identity of Adult Pancreatic Î² Cells. Cell Reports, 2014, 9, 2219-2232.	6.4	114
49	The zinc transporter ZIP12 regulates the pulmonary vascular response to chronic hypoxia. Nature, 2015, 524, 356-360.	27.8	113
50	Photoswitchable diacylglycerols enable optical control of protein kinase C. Nature Chemical Biology, 2016, 12, 755-762.	8.0	112
51	Coupling between cytosolic and mitochondrial calcium oscillations: role in the regulation of hepatic metabolism. Biochimica Et Biophysica Acta - Bioenergetics, 1998, 1366, 17-32.	1.0	107
52	Optical control of insulin release using a photoswitchable sulfonylurea. Nature Communications, 2014, 5, 5116.	12.8	106
53	Abnormal glucose tolerance and insulin secretion in pancreas-specific Tcf7l2-null mice. Diabetologia, 2012, 55, 2667-2676.	6.3	103
54	The Î±-cell in diabetes mellitus. Nature Reviews Endocrinology, 2018, 14, 694-704.	9.6	103

#	Article	IF	Citations
55	Glucose-stimulated Preproinsulin Gene Expression and Nucleartrans-Location of Pancreatic Duodenum Homeobox-1 Require Activation of Phosphatidylinositol 3-Kinase but Not p38 MAPK/SAPK2. Journal of Biological Chemistry, 2000, 275, 15977-15984.	3.4	102
56	Glucose Regulates Free Cytosolic Zn2+ Concentration, Slc39 (ZiP), and Metallothionein Gene Expression in Primary Pancreatic Islet Î²-Cells. Journal of Biological Chemistry, 2011, 286, 25778-25789.	3.4	102
57	Mitochondrial and ER-Targeted eCALWY Probes Reveal High Levels of Free Zn²⁺. ACS Chemical Biology, 2014, 9, 2111-2120.	3.4	102
58	Inhibition of Mitochondrial Na+-Ca2+ Exchange Restores Agonist-induced ATP Production and Ca2+ Handling in Human Complex I Deficiency. Journal of Biological Chemistry, 2004, 279, 40328-40336.	3.4	101
59	Inhibition by glucose or leptin of hypothalamic neurons expressing neuropeptide Y requires changes in AMP-activated protein kinase activity. Diabetologia, 2006, 50, 168-177.	6.3	100
60	Ca2+ microdomains and the control of insulin secretion. Cell Calcium, 2006, 40, 539-551.	2.4	100
61	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
62	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
63	Metformin Prevents Glucose-Induced Protein Kinase C-Â2 Activation in Human Umbilical Vein Endothelial Cells Through an Antioxidant Mechanism. Diabetes, 2005, 54, 1123-1131.	0.6	97
64	When less is more: the forbidden fruits of gene repression in the adult Î²â€cell. Diabetes, Obesity and Metabolism, 2013, 15, 503-512.	4.4	96
65	Loss of ZnT8 function protects against diabetes by enhanced insulin secretion. Nature Genetics, 2019, 51, 1596-1606.	21.4	96
66	5â€²-AMP-activated Protein Kinase Controls Insulin-containing Secretory Vesicle Dynamics. Journal of Biological Chemistry, 2003, 278, 52042-52051.	3.4	94
67	SLC30A8 mutations in type 2 diabetes. Diabetologia, 2015, 58, 31-36.	6.3	92
68	An essential role for the Zn2+ transporter ZIP7 in B cell development. Nature Immunology, 2019, 20, 350-361.	14.5	92
69	Imaging Ca2+ concentration changes at the secretory vesicle surface with a recombinant targeted cameleon. Current Biology, 1999, 9, 915-S1.	3.9	91
70	Glucose-dependent Translocation of Insulin Promoter Factor-1 (IPF-1) between the Nuclear Periphery and the Nucleoplasm of Single MIN6 Î²-Cells. Journal of Biological Chemistry, 1998, 273, 23241-23247.	3.4	89
71	Selective disruption of Tcf7l2 in the pancreatic Î² cell impairs secretory function and lowers Î² cell mass. Human Molecular Genetics, 2015, 24, 1390-1399.	2.9	89
72	Chronic Activation of Î³2 AMPK Induces Obesity and Reduces Î² Cell Function. Cell Metabolism, 2016, 23, 821-836.	16.2	87

#	Article	IF	Citations
73	Dynamics of Glucose-induced Membrane Recruitment of Protein Kinase C Î²II in Living Pancreatic Islet Î²-Cells. Journal of Biological Chemistry, 2002, 277, 37702-37710.	3.4	86
74	Overexpression of Monocarboxylate Transporter-1 (<i>Slc16a1</i>) in Mouse Pancreatic Î²-Cells Leads to Relative Hyperinsulinism During Exercise. Diabetes, 2012, 61, 1719-1725.	0.6	86
75	Dynamic Imaging of Endoplasmic Reticulum Ca2+ Concentration in Insulin-Secreting MIN6 Cells Using Recombinant Targeted Cameleons: Roles of Sarco(endo)plasmic Reticulum Ca2+-ATPase (SERCA)-2 and Ryanodine Receptors. Diabetes, 2002, 51, S190-S201.	0.6	85
76	Sodium-potassium ATPase 1 subunit is a molecular partner of Wolframin, an endoplasmic reticulum protein involved in ER stress. Human Molecular Genetics, 2007, 17, 190-200.	2.9	85
77	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
78	Insulin targeting to the regulated secretory pathway after fusion with green fluorescent protein and firefly luciferase. Biochemical Journal, 1998, 331, 669-675.	3.7	83
79	eZinCh-2: A Versatile, Genetically Encoded FRET Sensor for Cytosolic and Intraorganelle Zn²⁺ Imaging. ACS Chemical Biology, 2015, 10, 2126-2134.	3.4	82
80	Distinct roles for insulin and insulin-like growth factor-1 receptors in pancreatic beta-cell glucose sensing revealed by RNA silencing. Biochemical Journal, 2004, 377, 149-158.	3.7	81
81	ATP Regulation in Adult Rat Cardiomyocytes. Journal of Biological Chemistry, 2006, 281, 28058-28067.	3.4	81
82	Mitochondrial priming modifies Ca2+ oscillations and insulin secretion in pancreatic islets. Biochemical Journal, 2001, 353, 175-180.	3.7	80
83	Optical Control of Insulin Secretion Using an Incretin Switch. Angewandte Chemie - International Edition, 2015, 54, 15565-15569.	13.8	80
84	mTORC1-to-AMPK switching underlies Î² cell metabolic plasticity during maturation and diabetes. Journal of Clinical Investigation, 2019, 129, 4124-4137.	8.2	80
85	Kinesin I and cytoplasmic dynein orchestrate glucose-stimulated insulin-containing vesicle movements in clonal MIN6 Î²-cells. Biochemical and Biophysical Research Communications, 2003, 311, 272-282.	2.1	79
86	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
87	Regulation of Gene Expression by Glucose in Pancreatic Î²-Cells (MIN6) via Insulin Secretion and Activation of Phosphatidylinositol 3â€²-Kinase. Journal of Biological Chemistry, 2000, 275, 36269-36277.	3.4	77
88	Identification of a Ras GTPase-activating protein regulated by receptor-mediated Ca2+ oscillations. EMBO Journal, 2004, 23, 1749-1760.	7.8	77
89	Think zinc: New roles for zinc in the control of insulin secretion. Islets, 2010, 2, 49-50.	1.8	77
90	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

#	Article	IF	Citations
91	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
92	Role for Plasma Membrane-Related Ca2+-ATPase-1 (ATP2C1) in Pancreatic Â-Cell Ca2+ Homeostasis Revealed by RNA Silencing. Diabetes, 2004, 53, 393-400.	0.6	74
93	Hypothalamic AMP-Activated Protein Kinase Regulates Glucose Production. Diabetes, 2010, 59, 2435-2443.	0.6	74
94	The effects of kisspeptin on Î²â€cell function, serum metabolites and appetite in humans. Diabetes, Obesity and Metabolism, 2018, 20, 2800-2810.	4.4	74
95	Frequency-dependent mitochondrial Ca2+ accumulation regulates ATP synthesis in pancreatic Î² cells. Pflugers Archiv European Journal of Physiology, 2013, 465, 543-554.	2.8	73
96	Regulation of mitochondrial glycerol-phosphate dehydrogenase by Ca2+ within electropermeabilized insulin-secreting cells (INS-1). Biochimica Et Biophysica Acta - Molecular Cell Research, 1992, 1175, 107-113.	4.1	72
97	SLC30A9 mutation affecting intracellular zinc homeostasis causes a novel cerebro-renal syndrome. Brain, 2017, 140, 928-939.	7.6	72
98	Upstream Stimulatory Factor-2 (USF2) Activity Is Required for Glucose Stimulation of L-Pyruvate Kinase Promoter Activity in Single Living Islet Î²-Cells. Journal of Biological Chemistry, 1997, 272, 20636-20640.	3.4	71
99	Inhibition of AMP-Activated Protein Kinase Protects Pancreatic Â-Cells From Cytokine-Mediated Apoptosis and CD8+ T-Cell-Induced Cytotoxicity. Diabetes, 2008, 57, 415-423.	0.6	71
100	LKB1 and AMPK differentially regulate pancreatic Î²â€cell identity. FASEB Journal, 2014, 28, 4972-4985.	0.5	71
101	Involvement of MAP kinase in insulin signalling revealed by non-invasive imaging of luciferase gene expression in single living cells. Current Biology, 1995, 5, 890-899.	3.9	69
102	The AMP-regulated kinase family: Enigmatic targets for diabetes therapy. Molecular and Cellular Endocrinology, 2009, 297, 41-49.	3.2	69
103	Control of insulin secretion by GLP-1. Peptides, 2018, 100, 75-84.	2.4	69
104	Covid-19 and Diabetes: A Complex Bidirectional Relationship. Frontiers in Endocrinology, 2020, 11, 582936.	3.5	67
105	Involvement of Per-Arnt-Sim (PAS) kinase in the stimulation of preproinsulin and pancreatic duodenum homeobox 1 gene expression by glucose. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 8319-8324.	7.1	66
106	Minireview: Intraislet Regulation of Insulin Secretion in Humans. Molecular Endocrinology, 2013, 27, 1984-1995.	3.7	66
107	Incretin-Modulated Beta Cell Energetics in Intact Islets of Langerhans. Molecular Endocrinology, 2014, 28, 860-871.	3.7	66
108	Hyperglycemia-Induced Changes in ZIP7 and ZnT7 Expression Cause Zn2+ Release From the Sarco(endo)plasmic Reticulum and Mediate ER Stress in the Heart. Diabetes, 2017, 66, 1346-1358.	0.6	66

#	Article	IF	Citations
109	Persistent or Transient Human Î² Cell Dysfunction Induced by Metabolic Stress: Specific Signatures and Shared Gene Expression with Type 2 Diabetes. Cell Reports, 2020, 33, 108466.	6.4	65
110	Mitochondrial priming modifies Ca2+ oscillations and insulin secretion in pancreatic islets. Biochemical Journal, 2001, 353, 175.	3.7	64
111	Stimulation of Acetyl-CoA Carboxylase Gene Expression by Glucose Requires Insulin Release and Sterol Regulatory Element Binding Protein 1c in Pancreatic MIN6 Â-Cells. Diabetes, 2002, 51, 2536-2545.	0.6	64
112	Glucose-Dependent Regulation of Î³-Aminobutyric Acid (GABAA) Receptor Expression in Mouse Pancreatic Islet Î±-Cells. Diabetes, 2007, 56, 320-327.	0.6	64
113	The Mitochondrial Na+/Ca2+ Exchanger Upregulates Glucose Dependent Ca2+ Signalling Linked to Insulin Secretion. PLoS ONE, 2012, 7, e46649.	2.5	64
114	Beta cell connectivity in pancreatic islets: a type 2 diabetes target?. Cellular and Molecular Life Sciences, 2015, 72, 453-467.	5.4	64
115	Lipid-tuned Zinc Transport Activity of Human ZnT8 Protein Correlates with Risk for Type-2 Diabetes. Journal of Biological Chemistry, 2016, 291, 26950-26957.	3.4	64
116	LKB1 deletion with the <i>RIP2.Cre</i> 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
117	DICER Inactivation Identifies Pancreatic Î²-Cell â€œDisallowedâ€•Genes Targeted by MicroRNAs. Molecular Endocrinology, 2015, 29, 1067-1079.	3.7	63
118	Metabolic and functional specialisations of the pancreatic beta cell: gene disallowance, mitochondrial metabolism and intercellular connectivity. Diabetologia, 2020, 63, 1990-1998.	6.3	63
119	Mammalian Exocyst Complex Is Required for the Docking Step of InsulinVesicle Exocytosis. Journal of Biological Chemistry, 2005, 280, 25565-25570.	3.4	62
120	Sustained Exposure to High Glucose Concentrations Modifies Glucose Signaling and the Mechanics of Secretory Vesicle Fusion in Primary Rat Pancreatic Â-Cells. Diabetes, 2006, 55, 1057-1065.	0.6	62
121	Mitochondrial localization as a determinant of capacitative Ca2+ entry in HeLa cells. Cell Calcium, 2004, 36, 499-508.	2.4	61
122	Glucose Is Necessary for Embryonic Pancreatic Endocrine Cell Differentiation. Journal of Biological Chemistry, 2007, 282, 15228-15237.	3.4	61
123	TCF7L2 controls insulin gene expression and insulin secretion in mature pancreatic Î²-cells. Biochemical Society Transactions, 2008, 36, 357-359.	3.4	61
124	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
125	Intracellular zinc in insulin secretion and action: a determinant of diabetes risk?. Proceedings of the Nutrition Society, 2016, 75, 61-72.	1.0	61
126	Adrenaline Stimulates Glucagon Secretion by Tpc2-Dependent Ca2+ Mobilization From Acidic Stores in Pancreatic Î±-Cells. Diabetes, 2018, 67, 1128-1139.	0.6	61

#	Article	IF	Citations
127	Agonist-induced membrane nanodomain clustering drives GLP-1 receptor responses in pancreatic beta cells. PLoS Biology, 2019, 17, e3000097.	5.6	61
128	A Rare Mutation in <i>ABCC8</i>/SUR1 Leading to Altered ATP-Sensitive K+ Channel Activity and Î²-Cell Glucose Sensing Is Associated With Type 2 Diabetes in Adults. Diabetes, 2008, 57, 1595-1604.	0.6	60
129	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
130	Analysis of Purified Pancreatic Islet Beta and Alpha Cell Transcriptomes Reveals 11Î²-Hydroxysteroid Dehydrogenase (Hsd11b1) as a Novel Disallowed Gene. Frontiers in Genetics, 2017, 08, 41.	2.3	60
131	Molecular Genetic Regulation of Slc30a8/ZnT8 Reveals a Positive Association With Glucose Tolerance. Molecular Endocrinology, 2016, 30, 77-91.	3.7	59
132	Overexpression of lactate dehydrogenase A attenuates glucose-induced insulin secretion in stable MIN-6 Î²-cell lines. FEBS Letters, 1998, 430, 213-216.	2.8	58
133	Dualâ€Modal Magnetic Resonance/Fluorescent Zinc Probes for Pancreatic Î²â€Cell Mass Imaging. Chemistry - A European Journal, 2015, 21, 5023-5033.	3.3	57
134	Glucocorticoid Metabolism in Obesity and Following Weight Loss. Frontiers in Endocrinology, 2020, 11, 59.	3.5	56
135	ATP-dependent interaction of the cytosolic domains of the inwardly rectifying K+ channel Kir6.2 revealed by fluorescence resonance energy transfer. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 76-81.	7.1	54
136	Insulin Secretion Is Controlled by mGlu5 Metabotropic Glutamate Receptors. Molecular Pharmacology, 2006, 69, 1234-1241.	2.3	54
137	AMP-activated protein kinase regulates glucagon secretion from mouse pancreatic alpha cells. Diabetologia, 2011, 54, 125-134.	6.3	54
138	Real-time imaging of gene expression in single living cells. Chemistry and Biology, 1998, 5, R285-R290.	6.0	52
139	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
140	Glucocorticoids Reprogram Î²-Cell Signaling to Preserve Insulin Secretion. Diabetes, 2018, 67, 278-290.	0.6	52
141	PDX1LOW MAFALOW Î²-cells contribute to islet function and insulin release. Nature Communications, 2021, 12, 674.	12.8	51
142	Biologically targeted probes for Zn²⁺: a diversity oriented modular â€œclick-S_NAr-clickâ€•approach. Chemical Science, 2014, 5, 3528-3535.	7.4	49
143	Pancreatic Î²â€cell Na⁺channels control global Ca²⁺signaling and oxidative metabolism by inducing Na⁺and Ca²⁺responses that are propagated into mitochondria. FASEB Journal, 2014, 28, 3301-3312.	0.5	49
144	Local and regional control of calcium dynamics in the pancreatic islet. Diabetes, Obesity and Metabolism, 2017, 19, 30-41.	4.4	49

#	Article	IF	Citations
145	MiRNAs in Î²-Cell Development, Identity, and Disease. Frontiers in Genetics, 2016, 7, 226.	2.3	49
146	Ca2+ binding to citrate cycle dehydrogenases. International Journal of Biochemistry & Cell Biology, 1990, 22, 1081-1088.	0.5	48
147	Isolation and Culture of Mouse Pancreatic Islets for Ex Vivo Imaging Studies with Trappable or Recombinant Fluorescent Probes. Methods in Molecular Biology, 2010, 633, 171-184.	0.9	48
148	Nicotinic Acid Adenine Dinucleotide Phosphate (NAADP) and Endolysosomal Two-pore Channels Modulate Membrane Excitability and Stimulus-Secretion Coupling in Mouse Pancreatic Î² Cells. Journal of Biological Chemistry, 2015, 290, 21376-21392.	3.4	48
149	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
150	Insulin secretion: Feed-forward control of insulin biosynthesis?. Current Biology, 1999, 9, R443-R445.	3.9	47
151	Limited role for SREBP-1c in defective glucose-induced insulin secretion from Zucker diabetic fatty rat islets: a functional and gene profiling analysis. American Journal of Physiology - Endocrinology and Metabolism, 2006, 291, E982-E994.	3.5	47
152	Neuronatin regulates pancreatic Î² cell insulin content and secretion. Journal of Clinical Investigation, 2018, 128, 3369-3381.	8.2	47
153	Per-arnt-sim (PAS) domain-containing protein kinase is downregulated in human islets in type 2 diabetes and regulates glucagon secretion. Diabetologia, 2011, 54, 819-827.	6.3	46
154	Sarco(endo)plasmic reticulum ATPase is a molecular partner of Wolfram syndrome 1 protein, which negatively regulates its expression. Human Molecular Genetics, 2015, 24, 814-827.	2.9	46
155	Allosteric Optical Control of a Class B Gâ€Proteinâ€Coupled Receptor. Angewandte Chemie - International Edition, 2016, 55, 5865-5868.	13.8	45
156	Sorcin Links Pancreatic Î²-Cell Lipotoxicity to ER Ca2+ Stores. Diabetes, 2016, 65, 1009-1021.	0.6	45
157	Mice harboring the human <i>SLC30A8</i> R138X loss-of-function mutation have increased insulin secretory capacity. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7642-E7649.	7.1	45
158	PPARÎ²/Î´ affects pancreatic Î² cell mass and insulin secretion in mice. Journal of Clinical Investigation, 2012, 122, 4105-4117.	8.2	45
159	Ca2+-Induced Ca2+Release in Pancreatic Islet Î²-Cells: Critical Evaluation of the Use of Endoplasmic Reticulum-Targeted â€œCameleonsâ€• Endocrinology, 2004, 145, 4540-4549.	2.8	44
160	Role of microRNAs in the age-associated decline of pancreatic beta cell function in rat islets. Diabetologia, 2016, 59, 161-169.	6.3	44
161	Replication and cross-validation of type 2 diabetes subtypes based on clinical variables: an IMI-RHAPSODY study. Diabetologia, 2021, 64, 1982-1989.	6.3	44
162	Glucose sensing by hypothalamic neurones and pancreatic islet cells: AMPle evidence for common mechanisms?. Experimental Physiology, 2007, 92, 311-319.	2.0	43

#	Article	IF	Citations
163	Lanthanide(III) Complexes of Rhodamineâ€"DO3A Conjugates as Agents for Dual-Modal Imaging. Inorganic Chemistry, 2013, 52, 14284-14293.	4.0	43
164	Mechanisms of Weight Loss After Obesity Surgery. Endocrine Reviews, 2022, 43, 19-34.	20.1	43
165	Insulin Vesicle Release: Walk, Kiss, Pause â€¦ Then Run. Physiology, 2006, 21, 189-196.	3.1	42
166	Molecular phenotyping of multiple mouse strains under metabolic challenge uncovers a role for Elovl2 in glucose-induced insulin secretion. Molecular Metabolism, 2017, 6, 340-351.	6.5	42
167	Studies into the Mechanism Whereby Insulin Activates Pyruvate Dehydrogenase Complex in Adipose Tissue. Annals of the New York Academy of Sciences, 1989, 573, 285-296.	3.8	41
168	A Targeted RNAi Screen Identifies Endocytic Trafficking Factors That Control GLP-1 Receptor Signaling in Pancreatic Î²-Cells. Diabetes, 2018, 67, 385-399.	0.6	41
169	Genetic and biased agonist-mediated reductions in Î²-arrestin recruitment prolong cAMP signaling at glucagon family receptors. Journal of Biological Chemistry, 2021, 296, 100133.	3.4	41
170	The Zinc Transporter Slc30a8/ZnT8 Is Required in a Subpopulation of Pancreatic Î±-Cells for Hypoglycemia-induced Glucagon Secretion. Journal of Biological Chemistry, 2015, 290, 21432-21442.	3.4	40
171	Limited impact on glucose homeostasis of leptin receptor deletion from insulin- or proglucagon-expressing cells. Molecular Metabolism, 2015, 4, 619-630.	6.5	40
172	Zn2+-transporters ZIP7 and ZnT7 play important role in progression of cardiac dysfunction via affecting sarco(endo)plasmic reticulum-mitochondria coupling in hyperglycemic cardiomyocytes. Mitochondrion, 2019, 44, 41-52.	3.4	40
173	Glucose metabolism and glutamate analog acutely alkalinize pH of insulin secretory vesicles of pancreatic Î²-cells. American Journal of Physiology - Endocrinology and Metabolism, 2003, 285, E262-E271.	3.5	39
174	MiRâ€184 expression is regulated by AMPK in pancreatic islets. FASEB Journal, 2018, 32, 2587-2600.	0.5	39
175	Insulin-Stimulated Fatty Acid Synthase Gene Expression Does Not Require Increased Sterol Response Element Binding Protein 1 Transcription in Primary Adipocytes. Biochemical and Biophysical Research Communications, 2002, 291, 439-443.	2.1	38
176	The &Bgr;-Cell in Type 2 Diabetes and in Obesity. , 2008, 36, 118-134.		38
177	Defects in mitophagy promote redoxâ€driven metabolic syndrome in the absence of <scp>TP</scp> 53 <scp>INP</scp> 1. EMBO Molecular Medicine, 2015, 7, 802-818.	6.9	38
178	Kiss and run exocytosis of dense core secretory vesicles. NeuroReport, 2004, 15, 79-81.	1.2	37
179	ATP depletion inhibits Ca2+ release, influx and extrusion in pancreatic acinar cells but not pathological Ca2+ responses induced by bile. Pflugers Archiv European Journal of Physiology, 2008, 455, 1025-1039.	2.8	37
180	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

#	Article	IF	Citations
181	FoxO1 Is Required for the Regulation of Preproglucagon Gene Expression by Insulin in Pancreatic Î±TC1-9 Cells. Journal of Biological Chemistry, 2006, 281, 39358-39369.	3.4	36
182	A role for the CREB coâ€activator CRTC2 in the hypothalamic mechanisms linking glucose sensing with gene regulation. EMBO Reports, 2009, 10, 1175-1181.	4.5	36
183	Hypoxia lowers SLC30A8/ZnT8 expression and free cytosolic Zn2+ in pancreatic beta cells. Diabetologia, 2014, 57, 1635-1644.	6.3	36
184	Loss of Liver Kinase B1 (LKB1) in Beta Cells Enhances Glucose-stimulated Insulin Secretion Despite Profound Mitochondrial Defects. Journal of Biological Chemistry, 2015, 290, 20934-20946.	3.4	36
185	Signalling, trafficking and glucoregulatory properties of glucagonâ€like peptideâ€1 receptor agonists exendinâ€4 and lixisenatide. British Journal of Pharmacology, 2020, 177, 3905-3923.	5.4	36
186	Temperature-Sensitive Random Insulin Granule Diffusion is a Prerequisite for Recruiting Granules for Release. Traffic, 2004, 5, 750-762.	2.7	35
187	Impact of PPARÎ³ overexpression and activation on pancreatic islet gene expression profile analyzed with oligonucleotide microarrays. American Journal of Physiology - Endocrinology and Metabolism, 2004, 287, E390-E404.	3.5	34
188	Roles of lncRNAs in pancreatic beta cell identity and diabetes susceptibility. Frontiers in Genetics, 2014, 5, 193.	2.3	34
189	Sensors for measuring subcellular zinc pools. Metallomics, 2018, 10, 229-239.	2.4	34
190	Regulating Glucagon Secretion: Somatostatin in the Spotlight. Diabetes, 2009, 58, 299-301.	0.6	33
191	Ring1b bookmarks genes in pancreatic embryonic progenitors for repression in adult Î² cells. Genes and Development, 2013, 27, 52-63.	5.9	33
192	Pancreatic Î²â€cell imaging in humans: fiction or option?. Diabetes, Obesity and Metabolism, 2016, 18, 6-15.	4.4	33
193	Remote control of glucose homeostasis in vivo using photopharmacology. Scientific Reports, 2017, 7, 291.	3.3	33
194	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
195	Disconnect between signalling potency and inÂvivo efficacy of pharmacokinetically optimised biased glucagon-like peptide-1 receptor agonists. Molecular Metabolism, 2020, 37, 100991.	6.5	32
196	The Influence of Peptide Context on Signaling and Trafficking of Glucagon-like Peptide-1 Receptor Biased Agonists. ACS Pharmacology and Translational Science, 2020, 3, 345-360.	4.9	32
197	Pancreatic and duodenal homeobox 1 (PDX1) phosphorylation at serine-269 is HIPK2-dependent and affects PDX1 subnuclear localization. Biochemical and Biophysical Research Communications, 2010, 399, 155-161.	2.1	30
198	Nucleo-cytosolic Shuttling of FoxO1 Directly Regulates Mouse Ins2 but Not Ins1 Gene Expression in Pancreatic Beta Cells (MIN6). Journal of Biological Chemistry, 2011, 286, 13647-13656.	3.4	30

#	Article	IF	Citations
199	Targeting of reporter molecules to mitochondria to measure calcium, ATP, and pH. Methods in Cell Biology, 2001, 65, 353-380.	1.1	29
200	Luciferase Expression for ATP Imaging: Application to Cardiac Myocytes. Methods in Cell Biology, 2007, 80, 341-352.	1.1	29
201	<i>Dorothy Hodgkin Lecture 2014</i> Understanding genes identified by genomeâ€wide association studies for Type 2 diabetes. Diabetic Medicine, 2014, 31, 1480-1487.	2.3	29
202	Chronic d-serine supplementation impairs insulin secretion. Molecular Metabolism, 2018, 16, 191-202.	6.5	29
203	Macrophage monocarboxylate transporter 1 promotes peripheral nerve regeneration after injury in mice. Journal of Clinical Investigation, 2021, 131, .	8.2	29
204	SREBP1 is required for the induction by glucose of pancreatic Î²-cell genes involved in glucose sensing. Journal of Lipid Research, 2008, 49, 814-822.	4.2	28
205	Animal Models of GWAS-Identified Type 2 Diabetes Genes. Journal of Diabetes Research, 2013, 2013, 1-12.	2.3	28
206	Ligand-Specific Factors Influencing GLP-1 Receptor Post-Endocytic Trafficking and Degradation in Pancreatic Beta Cells. International Journal of Molecular Sciences, 2020, 21, 8404.	4.1	28
207	Divergent Effects of Liraglutide, Exendin-4, and Sitagliptin on Beta-Cell Mass and Indicators of Pancreatitis in a Mouse Model of Hyperglycaemia. PLoS ONE, 2014, 9, e104873.	2.5	28
208	Hypothalamic glucagon signals through the KATP channels to regulate glucose production. Molecular Metabolism, 2014, 3, 202-208.	6.5	27
209	Diabetes: The importance of the liver. Current Biology, 2000, 10, R736-R738.	3.9	26
210	The two pore channel TPC2 is dispensable in pancreatic Î²-cells for normal Ca2+ dynamics and insulin secretion. Cell Calcium, 2016, 59, 32-40.	2.4	26
211	Calcium-insensitive splice variants of mammalian E1 subunit of 2-oxoglutarate dehydrogenase complex with tissue-specific patterns of expression. Biochemical Journal, 2016, 473, 1165-1178.	3.7	26
212	Distinct Molecular Signatures of Clinical Clusters in People With Type 2 Diabetes: An IMI-RHAPSODY Study. Diabetes, 2021, 70, 2683-2693.	0.6	26
213	Mitochondria-Associated Endoplasmic Reticulum Membranes in Insulin Signaling. Diabetes, 2014, 63, 3163-3165.	0.6	25
214	Age-related islet inflammation marks the proliferative decline of pancreatic beta-cells in zebrafish. ELife, 2018, 7, .	6.0	25
215	Calcium and Organelles: A Two-Sided Story. Biochemical and Biophysical Research Communications, 1998, 253, 549-557.	2.1	24
216	Metabolic and Functional Heterogeneity in Pancreatic Î² Cells. Journal of Molecular Biology, 2020, 432, 1395-1406.	4.2	24

#	Article	IF	Citations
217	Importin beta1 mediates the glucose-stimulated nuclear import of pancreatic and duodenal homeobox-1 in pancreatic islet beta-cells (MIN6). Biochemical Journal, 2004, 378, 219-227.	3.7	23
218	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
219	<i>RIP2</i>-mediated <i>LKB1</i> deletion causes axon degeneration in the spinal cord and hind-limb paralysis. DMM Disease Models and Mechanisms, 2011, 4, 193-202.	2.4	23
220	LKB1 and AMPKÎ±1 are required in pancreatic alpha cells for the normal regulation of glucagon secretion and responses to hypoglycemia. Molecular Metabolism, 2015, 4, 277-286.	6.5	23
221	Disallowance of <i>Acot7</i> in Î²-Cells Is Required for Normal Glucose Tolerance and Insulin Secretion. Diabetes, 2016, 65, 1268-1282.	0.6	23
222	Regulation of the pyruvate dehydrogenase complex by Ca2+ within toluene-permeabilized heart mitochondria. Biochimica Et Biophysica Acta - Molecular Cell Research, 1989, 1014, 263-270.	4.1	22
223	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
224	Glucose-Stimulated Insulin Secretion Does Not Require Activation of Pyruvate Dehydrogenase: Impact of Adenovirus-Mediated Overexpression of PDH Kinase and PDH Phosphate Phosphatase in Pancreatic Islets. Biochemical and Biophysical Research Communications, 2002, 291, 1081-1088.	2.1	21
225	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
226	Human Mutation within Per-Arnt-Sim (PAS) Domain-containing Protein Kinase (PASK) Causes Basal Insulin Hypersecretion*. Journal of Biological Chemistry, 2011, 286, 44005-44014.	3.4	21
227	Changes in the expression of the type 2 diabetes-associated gene <i>VPS13C</i> in the Î²-cell are associated with glucose intolerance in humans and mice. American Journal of Physiology - Endocrinology and Metabolism, 2016, 311, E488-E507.	3.5	21
228	Comment on Satin et al. â€œTake Me To Your Leaderâ€ An Electrophysiological Appraisal of the Role of Hub Cells in Pancreatic Islets. Diabetes 2020;69:830â€“836. Diabetes, 2020, 69, e10-e11.	0.6	21
229	Calcium signalling: NAADP comes out of the shadows. Biochemical Journal, 2003, 373, e3-e4.	3.7	20
230	Imaging a target of Ca2+ signalling: Dense core granule exocytosis viewed by total internal reflection fluorescence microscopy. Methods, 2008, 46, 233-238.	3.8	20
231	Over-expression of Slc30a8/ZnT8 selectively in the mouse Î± cell impairs glucagon release and responses to hypoglycemia. Nutrition and Metabolism, 2016, 13, 46.	3.0	20
232	Mitochondrial Ca2+ transport and the role of matrix Ca2+ in mammalian tissues. Biochemical Society Transactions, 1992, 20, 153-159.	3.4	19
233	Glucose enhances insulin promoter activity in MIN6 Î²-cells independently of changes in intracellular Ca2+ concentration and insulin secretion. Biochemical Journal, 1999, 342, 275-280.	3.7	19
234	Use of Genetically Encoded Sensors to Monitor Cytosolic ATP/ADP Ratio in Living Cells. Methods in Enzymology, 2014, 542, 289-311.	1.0	19

#	Article	IF	Citations
235	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
236	Down-regulation of vascular GLP-1 receptor expression in human subjects with obesity. Scientific Reports, 2018, 8, 10644.	3.3	19
237	Pancreatic alpha cell-selective deletion of Tcf7l2 impairs glucagon secretion and counter-regulatory responses to hypoglycaemia in mice. Diabetologia, 2017, 60, 1043-1050.	6.3	18
238	Regulation of Mammalian Gene Expression by Glucose. Physiology, 2000, 15, 149-154.	3.1	17
239	Control of insulin granule dynamics by AMPK dependent KLC1 phosphorylation. Islets, 2009, 1, 198-209.	1.8	17
240	The Impact of Pancreatic Beta Cell Heterogeneity on Type 1 Diabetes Pathogenesis. Current Diabetes Reports, 2018, 18, 112.	4.2	17
241	Adipocyte-specific deletion of Tcf7l2 induces dysregulated lipid metabolism and impairs glucose tolerance in mice. Diabetologia, 2021, 64, 129-141.	6.3	17
242	Intravital imaging of islet Ca2+ dynamics reveals enhanced Î² cell connectivity after bariatric surgery in mice. Nature Communications, 2021, 12, 5165.	12.8	17
243	The Role of Ca2+in the Hormonal Regulation of the Activities of Pyruvate Dehydrogenase and Oxoglutarate Dehydrogenase Complexes. Annals of the New York Academy of Sciences, 1989, 573, 206-217.	3.8	16
244	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
245	Could lncRNAs contribute to Î²-cell identity and its loss in TypeÂ 2 diabetes?. Biochemical Society Transactions, 2013, 41, 797-801.	3.4	15
246	Effects on pancreatic Beta and other Islet cells of the glucose-dependent insulinotropic polypeptide. Peptides, 2020, 125, 170201.	2.4	15
247	Long Non-Coding RNAs as Key Modulators of Pancreatic Î²-Cell Mass and Function. Frontiers in Endocrinology, 2020, 11, 610213.	3.5	15
248	Destabilization of Î² Cell FIT2 by saturated fatty acids alter lipid droplet numbers and contribute to ER stress and diabetes. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2113074119.	7.1	15
249	Control by Ca2+ of mitochondrial structure and function in pancreatic Î²-cells. Cell Calcium, 2020, 91, 102282.	2.4	14
250	Dysregulation of the Pdx1/Ovol2/Zeb2 axis in dedifferentiated Î²-cells triggers the induction of genes associated with epithelialâ€“mesenchymal transition in diabetes. Molecular Metabolism, 2021, 53, 101248.	6.5	14
251	Mitofusins <i>Mfn1</i> and <i>Mfn2</i> Are Required to Preserve Glucose- but Not Incretin-Stimulated Î²-Cell Connectivity and Insulin Secretion. Diabetes, 2022, 71, 1472-1489.	0.6	14
252	Convolutional neural networks for reconstruction of undersampled optical projection tomography data applied to in vivo imaging of zebrafish. Journal of Biophotonics, 2019, 12, e201900128.	2.3	13

#	Article	IF	Citations
253	Fostering improved human islet research: a European perspective. Diabetologia, 2019, 62, 1514-1516.	6.3	13
254	Loss of Î²-cell identity and diabetic phenotype in mice caused by disruption of CNOT3-dependent mRNA deadenylation. Communications Biology, 2020, 3, 476.	4.4	13
255	Functional Genomics in Pancreatic Î² Cells: Recent Advances in Gene Deletion and Genome Editing Technologies for Diabetes Research. Frontiers in Endocrinology, 2020, 11, 576632.	3.5	13
256	Dietary substitution of SFA with MUFA within high-fat diets attenuates hyperinsulinaemia and pancreatic islet dysfunction. British Journal of Nutrition, 2020, 124, 247-255.	2.3	13
257	A polysaccharide extract from the medicinal plant Maidong inhibits the IKKâ€"NF-ÎºB pathway and IL-1Î²â€"induced islet inflammation and increases insulin secretion. Journal of Biological Chemistry, 2020, 295, 12573-12587.	3.4	13
258	Paired box 6 programs essential exocytotic genes in the regulation of glucose-stimulated insulin secretion and glucose homeostasis. Science Translational Medicine, 2021, 13, .	12.4	13
259	Proglucagon Promoter Cre-Mediated AMPK Deletion in Mice Increases Circulating GLP-1 Levels and Oral Glucose Tolerance. PLoS ONE, 2016, 11, e0149549.	2.5	13
260	Effects of Ca2+ on the Activities of the Calcium-Sensitive Dehydrogenases Within the Mitochondria of Mammalian Tissues. Journal of Cardiovascular Pharmacology, 1988, 12, 69-72.	1.9	12
261	Insulin Secretion: Fatty Acid Signalling via Serpentine Receptors. Current Biology, 2003, 13, R403-R405.	3.9	11
262	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
263	Overexpression of ZAC impairs glucoseâ€stimulated insulin translation and secretion in clonal pancreatic betaâ€cells. Diabetes/Metabolism Research and Reviews, 2012, 28, 645-653.	4.0	11
264	GABA signaling: A route to new pancreatic Î² cells. Cell Research, 2017, 27, 309-310.	12.0	11
265	Hypothalamic arcuate nucleus glucokinase regulates insulin secretion and glucose homeostasis. Diabetes, Obesity and Metabolism, 2018, 20, 2246-2254.	4.4	11
266	Roles of Ca2+ ions in the control of ChREBP nuclear translocation. Journal of Endocrinology, 2012, 213, 115-122.	2.6	10
267	The Peutz-Jeghers kinase LKB1 suppresses polyp growth from intestinal cells of a proglucagon-expressing lineage. DMM Disease Models and Mechanisms, 2014, 7, 1275-86.	2.4	10
268	Allosterische optische Steuerung eines Klasseâ€Bâ€Gâ€Proteinâ€gekoppelten Rezeptors. Angewandte Chemie, 2016, 128, 5961-5965.	2.0	10
269	Cell type-specific deletion in mice reveals roles for PAS kinase in insulin and glucagon production. Diabetologia, 2016, 59, 1938-1947.	6.3	10
270	Pancreatic Sirtuin 3 Deficiency Promotes Hepatic Steatosis by Enhancing 5-Hydroxytryptamine Synthesis in Mice With Diet-Induced Obesity. Diabetes, 2021, 70, 119-131.	0.6	10

#	Article	IF	Citations
271	Importance of Both Imprinted Genes and Functional Heterogeneity in Pancreatic Beta Cells: Is There a Link?. International Journal of Molecular Sciences, 2021, 22, 1000.	4.1	10
272	The Role of MicroRNAs in the Pancreatic Differentiation of Pluripotent Stem Cells. MicroRNA (Shariqah, United Arab Emirates), 2014, 3, 54-63.	1.2	10
273	Glucose-Dependent miR-125b Is a Negative Regulator of Î²-Cell Function. Diabetes, 2022, 71, 1525-1545.	0.6	10
274	A surrogate of Roux-en-Y gastric bypass (the enterogastro anastomosis surgery) regulates multiple beta-cell pathways during resolution of diabetes in ob/ob mice. EBioMedicine, 2020, 58, 102895.	6.1	8
275	Evaluation of efficacy- versus affinity-driven agonism with biased GLP-1R ligands P5 and exendin-F1. Biochemical Pharmacology, 2021, 190, 114656.	4.4	8
276	Ca2+ signalling: a new route to NAADP. Biochemical Journal, 2008, 411, e1-e3.	3.7	7
277	Live-Cell Imaging of Vesicle Trafficking and Divalent Metal Ions by Total Internal Reflection Fluorescence (TIRF) Microscopy. Methods in Molecular Biology, 2013, 950, 13-26.	0.9	7
278	Sexually dimorphic roles for the type 2 diabetes-associated C2cd4b gene in murine glucose homeostasis. Diabetologia, 2021, 64, 850-864.	6.3	7
279	Consequences for Pancreatic Î²-Cell Identity and Function of Unregulated Transcript Processing. Frontiers in Endocrinology, 2021, 12, 625235.	3.5	7
280	Green Fluorescent Protein Calcium Biosensors: Calcium Imaging with GFP Cameleons. , 2002, 183, 255-264.		6
281	Lack of ZnT8 protects pancreatic islets from hypoxia- and cytokine induced cell death. Journal of Endocrinology, 2022, , .	2.6	6
282	Glucose enhances insulin promoter activity in MIN6 Î²-cells independently of changes in intracellular Ca2+ concentration and insulin secretion. Biochemical Journal, 1999, 342, 275.	3.7	5
283	Changes in microRNA expression during differentiation of embryonic and induced pluripotent stem cells to definitive endoderm. Gene Expression Patterns, 2015, 19, 70-82.	0.8	5
284	Modeling Type 2 Diabetes GWAS Candidate Gene Function in hESCs. Cell Stem Cell, 2016, 19, 281-282.	11.1	5
285	Controlling the identity of the adult pancreatic Î² cell. Nature Reviews Endocrinology, 2017, 13, 129-130.	9.6	5
286	Synthesis and <i>in vivo</i> 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
287	Glucose in the hypothalamic paraventricular nucleus regulates GLP-1 release. JCI Insight, 2020, 5, .	5.0	5
288	Homocysteine Metabolism Pathway Is Involved in the Control of Glucose Homeostasis: A Cystathionine Beta Synthase Deficiency Study in Mouse. Cells, 2022, 11, 1737.	4.1	5

#	Article	IF	Citations
289	Comment on: Schuit et al. Â-Cell-Specific Gene Repression: A Mechanism to Protect Against Inappropriate or Maladjusted Insulin Secretion? Diabetes 2012;61:969-975. Diabetes, 2012, 61, e16-e16.	0.6	4
290	Chromatin 3D interaction analysis of the STARD10 locus unveils FCHSD2 as a regulator of insulin secretion. Cell Reports, 2021, 34, 108703.	6.4	4
291	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
292	Manipulation and Measurement of AMPK Activity in Pancreatic Islets. Methods in Molecular Biology, 2018, 1732, 413-431.	0.9	4
293	2183-P: miR-125b Is Regulated by Glucose via AMPK and Impairs ÃŸ-Cell Function. Diabetes, 2019, 68, .	0.6	4
294	Opposing effects on regulated insulin secretion of acute vs chronic stimulation of AMP-activated protein kinase. Diabetologia, 2022, 65, 997-1011.	6.3	4
295	Autotaxin signaling facilitates Î² cell dedifferentiation and dysfunction induced by Sirtuin 3 deficiency. Molecular Metabolism, 2022, 60, 101493.	6.5	4
296	In vivo and in vitro characterization of <scp>GL0034</scp>, a novel longâ€acting <scp>glucagonâ€like peptide</scp>â€1 receptor agonist. Diabetes, Obesity and Metabolism, 2022, 24, 2090-2101.	4.4	4
297	Imaging glucose-regulated insulin secretion and gene expression in single islet Î²-cells. Cell Biochemistry and Biophysics, 2004, 40, 179-190.	1.8	3
298	The roles of cytosolic and intramitochondrial Ca2+ and the mitochondrial Ca2+-uniporter (MCU) in the stimulation of mammalian oxidative phosphorylation. Journal of Biological Chemistry, 2020, 295, 10506.	3.4	3
299	The control of pyruvate dehydrogenase phosphate phosphatase by Ca2+ and Mg2+ ions. Biochemical Society Transactions, 1987, 15, 835-836.	3.4	2
300	Generating New Candidate Genes for Neonatal Diabetes: Functional and Genetic Studies of Insulin Secretion in Type 2 Diabetes. , 2007, 12, 75-85.		2
301	Pancreas micromanages autophagy. Science, 2015, 347, 826-827.	12.6	2
302	Contributions of Mitochondrial Dysfunction to Î² Cell Failure in Diabetes Mellitus. , 2019, , 217-243.		2
303	Age matters: Grading granule secretion in beta cells. Journal of Biological Chemistry, 2020, 295, 8912-8913.	3.4	2
304	87-LB: Binding Kinetics, Bias, Receptor Internalization, and Effects on Insulin Secretion for a Novel GLP1R-GIPR Dual Agonist, HISHS-2001. Diabetes, 2021, 70, .	0.6	2
305	Vertical Sleeve Gastrectomy Lowers SGLT2/<i>Slc5a2</i> Expression in the Mouse Kidney. Diabetes, 2022, 71, 1623-1635.	0.6	2
306	Rapid purification and properties of pig heart NAD+ -isocitrate dehydrogenase. Biochemical Society Transactions, 1988, 16, 873-874.	3.4	1

#	Article	IF	Citations
307	Measurement of matrix Mg2+ concentration of rat heart mitochondria using fluorescent probes. Biochemical Society Transactions, 1990, 18, 894-895.	3.4	1
308	Proglucagon-Derived Peptides Do Not Significantly Affect Acute Exocrine Pancreas in Rats. Pancreas, 2016, 45, 967-973.	1.1	1
309	Obesity, diabetes and zinc: A workshop promoting knowledge and collaboration between the UK and Israel, november 28â€"30, 2016 â€" Israel. Journal of Trace Elements in Medicine and Biology, 2018, 49, 79-85.	3.0	1
310	Mitochondrial Calcium: Role in the Normal and Ischaemic/Reperfused Myocardium. , 2007, , 197-220.		1
311	Abstract 5294: The PanNET-related histone H3.3 chaperone Daxx regulates lineage specification and tissue homeostasis in the pancreas. , 2019, , .		1
312	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
313	Regulation of 2-oxoglutarate dehydrogenase and NAD-linked isocitrate dehydrogenase within toluene-permeabilized mitochondria. Biochemical Society Transactions, 1987, 15, 834-835.	3.4	0
314	Current Applications in Bioluminescenceâ€"21 September 1995, University of Wales College of Medicine, Cardiff, UK. Luminescence, 1996, 11, 49-54.	0.0	0
315	Imaging glucose-regulated insulin secretion and gene expression in single islet Î²-cells. Cell Biochemistry and Biophysics, 2004, 2004, 179-190.	1.8	0
316	Use of the mitochondrial Ca2+-transport inhibitors Ru360 and clonazepam to investigate cell Ca2+-signalling in adult cardiomyocytes: A cautionary tale. Journal of Molecular and Cellular Cardiology, 2006, 40, 924.	1.9	0
317	The relationship between P38â€"MAPK and AMPK during myocardial ischaemia. Journal of Molecular and Cellular Cardiology, 2007, 42, S52.	1.9	0
318	Targeting the AMP-regulated kinase family to treat diabetes: a research update. Diabetes Management, 2011, 1, 333-347.	0.5	0
319	Cellular and animal models of type 2 diabetes GWAS gene polymorphisms: what can we learn?. Drug Discovery Today: Disease Models, 2013, 10, e59-e64.	1.2	0
320	Pancreatic islet secretion: gabbling via GABA. Nature Metabolism, 2019, 1, 1032-1033.	11.9	0
321	38-OR: Deletion of the Mitofusins 1 and 2 (Mfn1 and Mfn2) from the Pancreatic Beta Cell Disrupts Mitochondrial Structure and Impairs Glucose-, but Not Incretin-, Stimulated Insulin Secretion. Diabetes, 2021, 70, 38-OR.	0.6	0
322	124-OR: Repetitive Ca2+ Waves Emanate from a Stable Leader Cell in Mouse Islets. Diabetes, 2021, 70, 124-OR.	0.6	0
323	228-LB: ÃŸ-arrestin-2 Deletion Influences GLP-1 Receptor Signaling in Pancreatic ÃŸ Cells In Vivo. Diabetes, 2021, 70, .	0.6	0
324	Mitochondrial Ca2+ Signalling. , 1998, , 163-175.		0

#	Article	IF	Citations
325	Luminescence Imaging of Gene Expression in Single Living Cells. , 1999, , 273-283.		0
326	Analysis of Regulated Gene Expression by Microinjection and Digital Luminescence Imaging of Single Living Cells. , 1999, , 299-326.		0
327	Dynamic imaging of compartmentalised intracellular free Zn 2+ concentrations in rat ventricular cardiomyocytes. FASEB Journal, 2015, 29, 951.3.	0.5	0
328	Zinc Transport in the Pancreatic Î²-Cell: Roles of ZnT (SLC30A) and ZiP (SLC39A) Family Members. , 2018, , 6047-6053.		0
329	Glucose regulates pancreatic [beta] cell Ca2+ dynamics and connectivity in vivo in the anterior chamber of the mouse eye. Endocrine Abstracts, 0, , .	0.0	0
330	161-LB: Inhibition of Kidney SGLT2 Expression following Bariatric Surgery in Mice. Diabetes, 2019, 68, 161-LB.	0.6	0
331	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
332	1912-P: Bariatric Surgery Downregulates Glucocorticoid Signaling in Mice. Diabetes, 2020, 69, .	0.6	0
333	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
334	320-OR: Bariatric Surgery Improves Ca2+ Dynamics across Pancreatic Islets In Vivo. Diabetes, 2020, 69, 320-OR.	0.6	0
335	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
336	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