

Guy A Rutter

List of Publications by Year in descending order

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336
papers

21,013
citations

8208

78
h-index

18944

123
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369
all docs

369
docs citations

369
times ranked

24615
citing authors

#	ARTICLE	IF	CITATIONS
1	Initiation and execution of lipotoxic ER stress in pancreatic β^2 -cells. <i>Journal of Cell Science</i> , 2008, 121, 2308-2318.	1.2	512
2	The Role of Oxidative Stress and Hypoxia in Pancreatic Beta-Cell Dysfunction in Diabetes Mellitus. <i>Antioxidants and Redox Signaling</i> , 2017, 26, 501-518.	2.5	433
3	Genetically encoded FRET sensors to monitor intracellular Zn ²⁺ homeostasis. <i>Nature Methods</i> , 2009, 6, 737-740.	9.0	395
4	Beta Cell Hubs Dictate Pancreatic Islet Responses to Glucose. <i>Cell Metabolism</i> , 2016, 24, 389-401.	7.2	370
5	Insulin Storage and Glucose Homeostasis in Mice Null for the Granule Zinc Transporter ZnT8 and Studies of the Type 2 Diabetes-Associated Variants. <i>Diabetes</i> , 2009, 58, 2070-2083.	0.3	347
6	MicroRNA-124a Regulates Foxa2 Expression and Intracellular Signaling in Pancreatic β^2 -Cell Lines. <i>Journal of Biological Chemistry</i> , 2007, 282, 19575-19588.	1.6	318
7	Metformin activates a duodenal AMPK-dependent pathway to lower hepatic glucose production in rats. <i>Nature Medicine</i> , 2015, 21, 506-511.	15.2	313
8	Mitochondrial calcium as a key regulator of mitochondrial ATP production in mammalian cells. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2009, 1787, 1324-1333.	0.5	311
9	Roles of 5'-AMP-activated protein kinase (AMPK) in mammalian glucose homeostasis. <i>Biochemical Journal</i> , 2003, 375, 1-16.	1.7	310
10	Pancreatic β^2 -cell identity, glucose sensing and the control of insulin secretion. <i>Biochemical Journal</i> , 2015, 466, 203-218.	1.7	299
11	Glucose Generates Sub-plasma Membrane ATP Microdomains in Single Islet β^2 -Cells. <i>Journal of Biological Chemistry</i> , 1999, 274, 13281-13291.	1.6	293
12	Regulation of ATP production by mitochondrial Ca ²⁺ . <i>Cell Calcium</i> , 2012, 52, 28-35.	1.1	262
13	Role for AMP-activated protein kinase in glucose-stimulated insulin secretion and preproinsulin gene expression. <i>Biochemical Journal</i> , 2003, 371, 761-774.	1.7	253
14	Glucose or Insulin, but not Zinc Ions, Inhibit Glucagon Secretion From Mouse Pancreatic β -Cells. <i>Diabetes</i> , 2005, 54, 1789-1797.	0.3	247
15	miR-29a and miR-29b Contribute to Pancreatic β^2 -Cell-Specific Silencing of Monocarboxylate Transporter 1 (Mct1). <i>Molecular and Cellular Biology</i> , 2011, 31, 3182-3194.	1.1	245
16	Physical Exercise-Induced Hypoglycemia Caused by Failed Silencing of Monocarboxylate Transporter 1 in Pancreatic β^2 Cells. <i>American Journal of Human Genetics</i> , 2007, 81, 467-474.	2.6	213
17	Cytoplasmic dynein regulates the subcellular distribution of mitochondria by controlling the recruitment of the fission factor dynamin-related protein-1. <i>Journal of Cell Science</i> , 2004, 117, 4389-4400.	1.2	208
18	Lipotoxicity disrupts incretin-regulated human β^2 cell connectivity. <i>Journal of Clinical Investigation</i> , 2013, 123, 4182-4194.	3.9	203

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19	Multiple Forms of "Kiss-and-Run" Exocytosis Revealed by Evanescent Wave Microscopy. <i>Current Biology</i> , 2003, 13, 563-567.	1.8	194
20	Regulation of mitochondrial metabolism by ER Ca ²⁺ release: an intimate connection. <i>Trends in Biochemical Sciences</i> , 2000, 25, 215-221.	3.7	192
21	Expanding role of AMPK in endocrinology. <i>Trends in Endocrinology and Metabolism</i> , 2006, 17, 205-215.	3.1	190
22	Dense core secretory vesicles revealed as a dynamic Ca ²⁺ store in neuroendocrine cells with a vesicle-associated membrane protein aequorin chimaera. <i>Journal of Cell Biology</i> , 2001, 155, 41-52.	2.3	188
23	TCF7L2 Regulates Late Events in Insulin Secretion From Pancreatic Islet β^2 -Cells. <i>Diabetes</i> , 2009, 58, 894-905.	0.3	185
24	Glucagon-like peptide-1 mobilizes intracellular Ca ²⁺ and stimulates mitochondrial ATP synthesis in pancreatic MIN6 beta-cells. <i>Biochemical Journal</i> , 2003, 369, 287-299.	1.7	179
25	Mechanisms of Dense Core Vesicle Recapture following "Kiss and Run" ("Cavicapture") Exocytosis in Insulin-secreting Cells. <i>Journal of Biological Chemistry</i> , 2004, 279, 47115-47124.	1.6	178
26	Dynamic imaging of free cytosolic ATP concentration during fuel sensing by rat hypothalamic neurones: evidence for ATP-independent control of ATP-sensitive K ⁺ channels. <i>Journal of Physiology</i> , 2002, 544, 429-445.	1.3	173
27	Nutrient secretion coupling in the pancreatic islet β^2 -cell: recent advances. <i>Molecular Aspects of Medicine</i> , 2001, 22, 247-284.	2.7	165
28	Ryanodine Receptor Type I and Nicotinic Acid Adenine Dinucleotide Phosphate Receptors Mediate Ca ²⁺ Release from Insulin-containing Vesicles in Living Pancreatic β^2 -Cells (MIN6). <i>Journal of Biological Chemistry</i> , 2003, 278, 11057-11064.	1.6	163
29	Targeting GLP-1 receptor trafficking to improve agonist efficacy. <i>Nature Communications</i> , 2018, 9, 1602.	5.8	162
30	Calcium signaling in pancreatic β^2 -cells in health and in Type 2 diabetes. <i>Cell Calcium</i> , 2014, 56, 340-361.	1.1	158
31	Metformin, but not leptin, regulates AMP-activated protein kinase in pancreatic islets: impact on glucose-stimulated insulin secretion. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2004, 286, E1023-E1031.	1.8	150
32	Myosin Va Transports Dense Core Secretory Vesicles in Pancreatic MIN6 β^2 -Cells. <i>Molecular Biology of the Cell</i> , 2005, 16, 2670-2680.	0.9	150
33	The Mitochondrial Ca ²⁺ Uniporter MCU Is Essential for Glucose-Induced ATP Increases in Pancreatic β^2 -Cells. <i>PLoS ONE</i> , 2012, 7, e39722.	1.1	146
34	Identification of genes selectively disallowed in the pancreatic islet. <i>Islets</i> , 2010, 2, 89-95.	0.9	140
35	Involvement of conventional kinesin in glucose-stimulated secretory granule movements and exocytosis in clonal pancreatic β^2 -cells. <i>Journal of Cell Science</i> , 2002, 115, 4177-4189.	1.2	137
36	Secretory-granule dynamics visualized in vivo with a phogrin green fluorescent protein chimaera. <i>Biochemical Journal</i> , 1998, 333, 193-199.	1.7	135

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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.	3.3	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.	0.3	132
39	Simultaneous evanescent wave imaging of insulin vesicle membrane and cargo during a single exocytotic event. Current Biology, 2000, 10, 1307-1310.	1.8	131
40	Zinc and diabetes. Archives of Biochemistry and Biophysics, 2016, 611, 79-85.	1.4	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.	2.9	131
42	Class II Phosphoinositide 3-Kinase Regulates Exocytosis of Insulin Granules in Pancreatic \hat{I}^2 Cells. Journal of Biological Chemistry, 2011, 286, 4216-4225.	1.6	130
43	Leader \hat{I}^2 -cells coordinate Ca^{2+} dynamics across pancreatic islets in vivo. Nature Metabolism, 2019, 1, 615-629.	5.1	128
44	Glucose-Stimulated Oscillations in Free Cytosolic ATP Concentration Imaged in Single Islet \hat{A} -Cells: Evidence for a Ca^{2+} -Dependent Mechanism. Diabetes, 2002, 51, S162-S170.	0.3	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.	3.9	126
46	ADCY5 Couples Glucose to Insulin Secretion in Human Islets. Diabetes, 2014, 63, 3009-3021.	0.3	124
47	Dynamic Changes in Cytosolic and Mitochondrial ATP Levels in Pancreatic Acinar Cells. Gastroenterology, 2010, 138, 1976-1987.e5.	0.6	120
48	Rfx6 Maintains the Functional Identity of Adult Pancreatic \hat{I}^2 Cells. Cell Reports, 2014, 9, 2219-2232.	2.9	114
49	The zinc transporter ZIP12 regulates the pulmonary vascular response to chronic hypoxia. Nature, 2015, 524, 356-360.	13.7	113
50	Photoswitchable diacylglycerols enable optical control of protein kinase C. Nature Chemical Biology, 2016, 12, 755-762.	3.9	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.	0.5	107
52	Optical control of insulin release using a photoswitchable sulfonyleurea. Nature Communications, 2014, 5, 5116.	5.8	106
53	Abnormal glucose tolerance and insulin secretion in pancreas-specific Tcf7l2-null mice. Diabetologia, 2012, 55, 2667-2676.	2.9	103
54	The \hat{I}^{\pm} -cell in diabetes mellitus. Nature Reviews Endocrinology, 2018, 14, 694-704.	4.3	103

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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. <i>Journal of Biological Chemistry</i> , 2000, 275, 15977-15984.	1.6	102
56	Glucose Regulates Free Cytosolic Zn ²⁺ Concentration, Slc39 (ZiP), and Metallothionein Gene Expression in Primary Pancreatic Islet Î ² -Cells. <i>Journal of Biological Chemistry</i> , 2011, 286, 25778-25789.	1.6	102
57	Mitochondrial and ER-Targeted eCALWY Probes Reveal High Levels of Free Zn ²⁺ . <i>ACS Chemical Biology</i> , 2014, 9, 2111-2120.	1.6	102
58	Inhibition of Mitochondrial Na ⁺ -Ca ²⁺ Exchange Restores Agonist-induced ATP Production and Ca ²⁺ Handling in Human Complex I Deficiency. <i>Journal of Biological Chemistry</i> , 2004, 279, 40328-40336.	1.6	101
59	Inhibition by glucose or leptin of hypothalamic neurons expressing neuropeptide Y requires changes in AMP-activated protein kinase activity. <i>Diabetologia</i> , 2006, 50, 168-177.	2.9	100
60	Ca ²⁺ microdomains and the control of insulin secretion. <i>Cell Calcium</i> , 2006, 40, 539-551.	1.1	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. <i>Diabetologia</i> , 2010, 53, 924-936.	2.9	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). <i>Biochemical Journal</i> , 2004, 378, 769-778.	1.7	97
63	Metformin Prevents Glucose-Induced Protein Kinase C-Î ² Activation in Human Umbilical Vein Endothelial Cells Through an Antioxidant Mechanism. <i>Diabetes</i> , 2005, 54, 1123-1131.	0.3	97
64	When less is more: the forbidden fruits of gene repression in the adult Î ² cell. <i>Diabetes, Obesity and Metabolism</i> , 2013, 15, 503-512.	2.2	96
65	Loss of ZnT8 function protects against diabetes by enhanced insulin secretion. <i>Nature Genetics</i> , 2019, 51, 1596-1606.	9.4	96
66	5â€²-AMP-activated Protein Kinase Controls Insulin-containing Secretory Vesicle Dynamics. <i>Journal of Biological Chemistry</i> , 2003, 278, 52042-52051.	1.6	94
67	SLC30A8 mutations in type 2 diabetes. <i>Diabetologia</i> , 2015, 58, 31-36.	2.9	92
68	An essential role for the Zn ²⁺ transporter ZIP7 in B cell development. <i>Nature Immunology</i> , 2019, 20, 350-361.	7.0	92
69	Imaging Ca ²⁺ concentration changes at the secretory vesicle surface with a recombinant targeted cameleon. <i>Current Biology</i> , 1999, 9, 915-S1.	1.8	91
70	Glucose-dependent Translocation of Insulin Promoter Factor-1 (IPF-1) between the Nuclear Periphery and the Nucleoplasm of Single MIN6 Î ² -Cells. <i>Journal of Biological Chemistry</i> , 1998, 273, 23241-23247.	1.6	89
71	Selective disruption of Tcf7l2 in the pancreatic Î ² cell impairs secretory function and lowers Î ² cell mass. <i>Human Molecular Genetics</i> , 2015, 24, 1390-1399.	1.4	89
72	Chronic Activation of Î ³ 2 AMPK Induces Obesity and Reduces Î ² Cell Function. <i>Cell Metabolism</i> , 2016, 23, 821-836.	7.2	87

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73	Dynamics of Glucose-induced Membrane Recruitment of Protein Kinase C $\hat{\beta}$ II in Living Pancreatic Islet $\hat{\beta}$ 2-Cells. <i>Journal of Biological Chemistry</i> , 2002, 277, 37702-37710.	1.6	86
74	Overexpression of Monocarboxylate Transporter-1 (<i>Slc16a1</i>) in Mouse Pancreatic $\hat{\beta}$ 2-Cells Leads to Relative Hyperinsulinism During Exercise. <i>Diabetes</i> , 2012, 61, 1719-1725.	0.3	86
75	Dynamic Imaging of Endoplasmic Reticulum Ca ²⁺ Concentration in Insulin-Secreting MIN6 Cells Using Recombinant Targeted Cameleons: Roles of Sarco(endo)plasmic Reticulum Ca ²⁺ -ATPase (SERCA)-2 and Ryanodine Receptors. <i>Diabetes</i> , 2002, 51, S190-S201.	0.3	85
76	Sodium-potassium ATPase 1 subunit is a molecular partner of Wolframin, an endoplasmic reticulum protein involved in ER stress. <i>Human Molecular Genetics</i> , 2007, 17, 190-200.	1.4	85
77	Stimulation of AMP-Activated Protein Kinase Is Essential for the Induction of Drug Metabolizing Enzymes by Phenobarbital in Human and Mouse Liver. <i>Molecular Pharmacology</i> , 2006, 70, 1925-1934.	1.0	84
78	Insulin targeting to the regulated secretory pathway after fusion with green fluorescent protein and firefly luciferase. <i>Biochemical Journal</i> , 1998, 331, 669-675.	1.7	83
79	eZinCh-2: A Versatile, Genetically Encoded FRET Sensor for Cytosolic and Intraorganellar Zn ²⁺ Imaging. <i>ACS Chemical Biology</i> , 2015, 10, 2126-2134.	1.6	82
80	Distinct roles for insulin and insulin-like growth factor-1 receptors in pancreatic beta-cell glucose sensing revealed by RNA silencing. <i>Biochemical Journal</i> , 2004, 377, 149-158.	1.7	81
81	ATP Regulation in Adult Rat Cardiomyocytes. <i>Journal of Biological Chemistry</i> , 2006, 281, 28058-28067.	1.6	81
82	Mitochondrial priming modifies Ca ²⁺ oscillations and insulin secretion in pancreatic islets. <i>Biochemical Journal</i> , 2001, 353, 175-180.	1.7	80
83	Optical Control of Insulin Secretion Using an Incretin Switch. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 15565-15569.	7.2	80
84	mTORC1-to-AMPK switching underlies $\hat{\beta}$ 2 cell metabolic plasticity during maturation and diabetes. <i>Journal of Clinical Investigation</i> , 2019, 129, 4124-4137.	3.9	80
85	Kinesin I and cytoplasmic dynein orchestrate glucose-stimulated insulin-containing vesicle movements in clonal MIN6 $\hat{\beta}$ 2-cells. <i>Biochemical and Biophysical Research Communications</i> , 2003, 311, 272-282.	1.0	79
86	AMP-Activated Protein Kinase: A New Beta-Cell Glucose Sensor?: Regulation by Amino Acids and Calcium Ions. <i>Diabetes</i> , 2004, 53, S67-S74.	0.3	78
87	Regulation of Gene Expression by Glucose in Pancreatic $\hat{\beta}$ 2-Cells (MIN6) via Insulin Secretion and Activation of Phosphatidylinositol 3 $\hat{\alpha}$ -Kinase. <i>Journal of Biological Chemistry</i> , 2000, 275, 36269-36277.	1.6	77
88	Identification of a Ras GTPase-activating protein regulated by receptor-mediated Ca ²⁺ oscillations. <i>EMBO Journal</i> , 2004, 23, 1749-1760.	3.5	77
89	Think zinc: New roles for zinc in the control of insulin secretion. <i>Islets</i> , 2010, 2, 49-50.	0.9	77
90	Impaired glucose homeostasis in transgenic mice expressing the human transient neonatal diabetes mellitus locus, TNDM. <i>Journal of Clinical Investigation</i> , 2004, 114, 339-348.	3.9	77

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91	ChREBP binding to fatty acid synthase and L-type pyruvate kinase genes is stimulated by glucose in pancreatic β^2 -cells. <i>Journal of Lipid Research</i> , 2006, 47, 2482-2491.	2.0	76
92	Role for Plasma Membrane-Related Ca^{2+} -ATPase-1 (ATP2C1) in Pancreatic β -Cell Ca^{2+} Homeostasis Revealed by RNA Silencing. <i>Diabetes</i> , 2004, 53, 393-400.	0.3	74
93	Hypothalamic AMP-Activated Protein Kinase Regulates Glucose Production. <i>Diabetes</i> , 2010, 59, 2435-2443.	0.3	74
94	The effects of kisspeptin on β -cell function, serum metabolites and appetite in humans. <i>Diabetes, Obesity and Metabolism</i> , 2018, 20, 2800-2810.	2.2	74
95	Frequency-dependent mitochondrial Ca^{2+} accumulation regulates ATP synthesis in pancreatic β^2 cells. <i>Pflugers Archiv European Journal of Physiology</i> , 2013, 465, 543-554.	1.3	73
96	Regulation of mitochondrial glycerol-phosphate dehydrogenase by Ca^{2+} within electropermeabilized insulin-secreting cells (INS-1). <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 1992, 1175, 107-113.	1.9	72
97	SLC30A9 mutation affecting intracellular zinc homeostasis causes a novel cerebro-renal syndrome. <i>Brain</i> , 2017, 140, 928-939.	3.7	72
98	Upstream Stimulatory Factor-2 (USF2) Activity Is Required for Glucose Stimulation of L-Pyruvate Kinase Promoter Activity in Single Living Islet β^2 -Cells. <i>Journal of Biological Chemistry</i> , 1997, 272, 20636-20640.	1.6	71
99	Inhibition of AMP-Activated Protein Kinase Protects Pancreatic β -Cells From Cytokine-Mediated Apoptosis and CD8+ T-Cell-Induced Cytotoxicity. <i>Diabetes</i> , 2008, 57, 415-423.	0.3	71
100	LKB1 and AMPK differentially regulate pancreatic β -cell identity. <i>FASEB Journal</i> , 2014, 28, 4972-4985.	0.2	71
101	Involvement of MAP kinase in insulin signalling revealed by non-invasive imaging of luciferase gene expression in single living cells. <i>Current Biology</i> , 1995, 5, 890-899.	1.8	69
102	The AMP-regulated kinase family: Enigmatic targets for diabetes therapy. <i>Molecular and Cellular Endocrinology</i> , 2009, 297, 41-49.	1.6	69
103	Control of insulin secretion by GLP-1. <i>Peptides</i> , 2018, 100, 75-84.	1.2	69
104	Covid-19 and Diabetes: A Complex Bidirectional Relationship. <i>Frontiers in Endocrinology</i> , 2020, 11, 582936.	1.5	67
105	Involvement of Per-Arnt-Sim (PAS) kinase in the stimulation of preproinsulin and pancreatic duodenum homeobox 1 gene expression by glucose. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 8319-8324.	3.3	66
106	Minireview: Intraislet Regulation of Insulin Secretion in Humans. <i>Molecular Endocrinology</i> , 2013, 27, 1984-1995.	3.7	66
107	Incretin-Modulated Beta Cell Energetics in Intact Islets of Langerhans. <i>Molecular Endocrinology</i> , 2014, 28, 860-871.	3.7	66
108	Hyperglycemia-Induced Changes in ZIP7 and ZnT7 Expression Cause Zn^{2+} Release From the Sarco(endo)plasmic Reticulum and Mediate ER Stress in the Heart. <i>Diabetes</i> , 2017, 66, 1346-1358.	0.3	66

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109	Persistent or Transient Human β Cell Dysfunction Induced by Metabolic Stress: Specific Signatures and Shared Gene Expression with Type 2 Diabetes. <i>Cell Reports</i> , 2020, 33, 108466.	2.9	65
110	Mitochondrial priming modifies Ca^{2+} oscillations and insulin secretion in pancreatic islets. <i>Biochemical Journal</i> , 2001, 353, 175.	1.7	64
111	Stimulation of Acetyl-CoA Carboxylase Gene Expression by Glucose Requires Insulin Release and Sterol Regulatory Element Binding Protein 1c in Pancreatic MIN6 β -Cells. <i>Diabetes</i> , 2002, 51, 2536-2545.	0.3	64
112	Glucose-Dependent Regulation of γ -Aminobutyric Acid (GABA _A) Receptor Expression in Mouse Pancreatic Islet β -Cells. <i>Diabetes</i> , 2007, 56, 320-327.	0.3	64
113	The Mitochondrial Na^{+}/Ca^{2+} Exchanger Upregulates Glucose Dependent Ca^{2+} Signalling Linked to Insulin Secretion. <i>PLoS ONE</i> , 2012, 7, e46649.	1.1	64
114	Beta cell connectivity in pancreatic islets: a type 2 diabetes target?. <i>Cellular and Molecular Life Sciences</i> , 2015, 72, 453-467.	2.4	64
115	Lipid-tuned Zinc Transport Activity of Human ZnT8 Protein Correlates with Risk for Type-2 Diabetes. <i>Journal of Biological Chemistry</i> , 2016, 291, 26950-26957.	1.6	64
116	LKB1 deletion with the <i>RIP2.Cre</i> transgene modifies pancreatic β -cell morphology and enhances insulin secretion in vivo. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2010, 298, E1261-E1273.	1.8	63
117	DICER Inactivation Identifies Pancreatic β -Cell α -Disallowed Genes Targeted by MicroRNAs. <i>Molecular Endocrinology</i> , 2015, 29, 1067-1079.	3.7	63
118	Metabolic and functional specialisations of the pancreatic beta cell: gene disallowance, mitochondrial metabolism and intercellular connectivity. <i>Diabetologia</i> , 2020, 63, 1990-1998.	2.9	63
119	Mammalian Exocyst Complex Is Required for the Docking Step of Insulin Vesicle Exocytosis. <i>Journal of Biological Chemistry</i> , 2005, 280, 25565-25570.	1.6	62
120	Sustained Exposure to High Glucose Concentrations Modifies Glucose Signaling and the Mechanics of Secretory Vesicle Fusion in Primary Rat Pancreatic β -Cells. <i>Diabetes</i> , 2006, 55, 1057-1065.	0.3	62
121	Mitochondrial localization as a determinant of capacitative Ca^{2+} entry in HeLa cells. <i>Cell Calcium</i> , 2004, 36, 499-508.	1.1	61
122	Glucose Is Necessary for Embryonic Pancreatic Endocrine Cell Differentiation. <i>Journal of Biological Chemistry</i> , 2007, 282, 15228-15237.	1.6	61
123	TCF7L2 controls insulin gene expression and insulin secretion in mature pancreatic β -cells. <i>Biochemical Society Transactions</i> , 2008, 36, 357-359.	1.6	61
124	Carbohydrate-Responsive Element-Binding Protein (ChREBP) Is a Negative Regulator of ARNT/HIF-1 β Gene Expression in Pancreatic Islet β -Cells. <i>Diabetes</i> , 2010, 59, 153-160.	0.3	61
125	Intracellular zinc in insulin secretion and action: a determinant of diabetes risk?. <i>Proceedings of the Nutrition Society</i> , 2016, 75, 61-72.	0.4	61
126	Adrenaline Stimulates Glucagon Secretion by Tpc2-Dependent Ca^{2+} Mobilization From Acidic Stores in Pancreatic β -Cells. <i>Diabetes</i> , 2018, 67, 1128-1139.	0.3	61

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127	Agonist-induced membrane nanodomain clustering drives GLP-1 receptor responses in pancreatic beta cells. <i>PLoS Biology</i> , 2019, 17, e3000097.	2.6	61
128	A Rare Mutation in <i>ABCC8</i> /SUR1 Leading to Altered ATP-Sensitive K ⁺ Channel Activity and β^2 -Cell Glucose Sensing Is Associated With Type 2 Diabetes in Adults. <i>Diabetes</i> , 2008, 57, 1595-1604.	0.3	60
129	Decreased STARD10 Expression Is Associated with Defective Insulin Secretion in Humans and Mice. <i>American Journal of Human Genetics</i> , 2017, 100, 238-256.	2.6	60
130	Analysis of Purified Pancreatic Islet Beta and Alpha Cell Transcriptomes Reveals 11 β -Hydroxysteroid Dehydrogenase (<i>Hsd11b1</i>) as a Novel Disallowed Gene. <i>Frontiers in Genetics</i> , 2017, 08, 41.	1.1	60
131	Molecular Genetic Regulation of <i>Slc30a8</i> / <i>ZnT8</i> Reveals a Positive Association With Glucose Tolerance. <i>Molecular Endocrinology</i> , 2016, 30, 77-91.	3.7	59
132	Overexpression of lactate dehydrogenase A attenuates glucose-induced insulin secretion in stable MIN-6 β^2 -cell lines. <i>FEBS Letters</i> , 1998, 430, 213-216.	1.3	58
133	Dual-Modal Magnetic Resonance/Fluorescent Zinc Probes for Pancreatic β^2 -Cell Mass Imaging. <i>Chemistry - A European Journal</i> , 2015, 21, 5023-5033.	1.7	57
134	Glucocorticoid Metabolism in Obesity and Following Weight Loss. <i>Frontiers in Endocrinology</i> , 2020, 11, 59.	1.5	56
135	ATP-dependent interaction of the cytosolic domains of the inwardly rectifying K ⁺ channel Kir6.2 revealed by fluorescence resonance energy transfer. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2004, 101, 76-81.	3.3	54
136	Insulin Secretion Is Controlled by mGlu5 Metabotropic Glutamate Receptors. <i>Molecular Pharmacology</i> , 2006, 69, 1234-1241.	1.0	54
137	AMP-activated protein kinase regulates glucagon secretion from mouse pancreatic alpha cells. <i>Diabetologia</i> , 2011, 54, 125-134.	2.9	54
138	Real-time imaging of gene expression in single living cells. <i>Chemistry and Biology</i> , 1998, 5, R285-R290.	6.2	52
139	Glucose-Induced Nuclear Shuttling of ChREBP Is Mediated by Sorcin and Ca ²⁺ Ions in Pancreatic β^2 -Cells. <i>Diabetes</i> , 2012, 61, 574-585.	0.3	52
140	Glucocorticoids Reprogram β^2 -Cell Signaling to Preserve Insulin Secretion. <i>Diabetes</i> , 2018, 67, 278-290.	0.3	52
141	PDX1LOW MAFALOW β^2 -cells contribute to islet function and insulin release. <i>Nature Communications</i> , 2021, 12, 674.	5.8	51
142	Biologically targeted probes for Zn ²⁺ : a diversity oriented modular $\text{Ar-click}^{\text{N}}$ -approach. <i>Chemical Science</i> , 2014, 5, 3528-3535.	3.7	49
143	Pancreatic β^2 -cell Na ⁺ channels control global Ca ²⁺ signaling and oxidative metabolism by inducing Na ⁺ and Ca ²⁺ responses that are propagated into mitochondria. <i>FASEB Journal</i> , 2014, 28, 3301-3312.	0.2	49
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