

Patrik Rorsman

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1234276/publications.pdf>

Version: 2024-02-01

310
papers

33,580
citations

2322

98
h-index

4645

170
g-index

323
all docs

323
docs citations

323
times ranked

22372
citing authors

#	ARTICLE	IF	CITATIONS
1	A pancreatic islet-specific microRNA regulates insulin secretion. <i>Nature</i> , 2004, 432, 226-230.	27.8	1,932
2	The Obesity-Associated <i>FTO</i> Gene Encodes a 2-Oxoglutarate-Dependent Nucleic Acid Demethylase. <i>Science</i> , 2007, 318, 1469-1472.	12.6	1,305
3	Electrophysiology of the pancreatic β -cell. <i>Progress in Biophysics and Molecular Biology</i> , 1989, 54, 87-143.	2.9	984
4	Diabetes Mellitus and the β Cell: The Last Ten Years. <i>Cell</i> , 2012, 148, 1160-1171.	28.9	761
5	<i>miR-375</i> maintains normal pancreatic β - and β -cell mass. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 5813-5818.	7.1	710
6	Insulin granule dynamics in pancreatic beta cells. <i>Diabetologia</i> , 2003, 46, 1029-1045.	6.3	696
7	Opposite effects of tolbutamide and diazoxide on the ATP-dependent K^+ channel in mouse pancreatic β -cells. <i>Pflügers Archiv European Journal of Physiology</i> , 1986, 407, 493-499.	2.8	545
8	Pancreatic β -Cell Electrical Activity and Insulin Secretion: Of Mice and Men. <i>Physiological Reviews</i> , 2018, 98, 117-214.	28.8	497
9	Regulation of Insulin Secretion in Human Pancreatic Islets. <i>Annual Review of Physiology</i> , 2013, 75, 155-179.	13.1	496
10	Glucose-inhibition of glucagon secretion involves activation of GABA _A -receptor chloride channels. <i>Nature</i> , 1989, 341, 233-236.	27.8	453
11	Calcium-independent potentiation of insulin release by cyclic AMP in single β -cells. <i>Nature</i> , 1993, 363, 356-358.	27.8	365
12	Voltage-Gated Ion Channels in Human Pancreatic β -Cells: Electrophysiological Characterization and Role in Insulin Secretion. <i>Diabetes</i> , 2008, 57, 1618-1628.	0.6	362
13	Glucose dependent K^+ -channels in pancreatic β -cells are regulated by intracellular ATP. <i>Pflügers Archiv European Journal of Physiology</i> , 1985, 405, 305-309.	2.8	357
14	Calcium and delayed potassium currents in mouse pancreatic beta-cells under voltage-clamp conditions. <i>Journal of Physiology</i> , 1986, 374, 531-550.	2.9	344
15	Deletion of the G Protein-Coupled Receptor 30 Impairs Glucose Tolerance, Reduces Bone Growth, Increases Blood Pressure, and Eliminates Estradiol-Stimulated Insulin Release in Female Mice. <i>Endocrinology</i> , 2009, 150, 687-698.	2.8	343
16	Gene expression profiling in single cells from the pancreatic islets of Langerhans reveals lognormal distribution of mRNA levels. <i>Genome Research</i> , 2005, 15, 1388-1392.	5.5	337
17	Stimulation of insulin release by repaglinide and glibenclamide involves both common and distinct processes. <i>Diabetes</i> , 1998, 47, 345-351.	0.6	297
18	Glucose-sensing mechanisms in pancreatic β -cells. <i>Philosophical Transactions of the Royal Society B: Biological Sciences</i> , 2005, 360, 2211-2225.	4.0	281

#	ARTICLE	IF	CITATIONS
19	The voltage sensitive Lc-type Ca ²⁺ channel is functionally coupled to the exocytotic machinery. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 248-253.	7.1	273
20	Co-localization of L-type Ca ²⁺ channels and insulin-containing secretory granules and its significance for the initiation of exocytosis in mouse pancreatic B-cells.. EMBO Journal, 1995, 14, 50-57.	7.8	270
21	Overexpression of Alpha2A-Adrenergic Receptors Contributes to Type 2 Diabetes. Science, 2010, 327, 217-220.	12.6	266
22	Protein kinase A-dependent and -independent stimulation of exocytosis by cAMP in mouse pancreatic B-cells. Journal of Physiology, 1997, 502, 105-118.	2.9	264
23	MicroRNA-7a regulates pancreatic β cell function. Journal of Clinical Investigation, 2014, 124, 2722-2735.	8.2	251
24	Exocytosis elicited by action potentials and voltage-clamp calcium currents in individual mouse pancreatic β cells.. Journal of Physiology, 1993, 472, 665-688.	2.9	250
25	The pancreatic beta-cell as a fuel sensor: an electrophysiologist's viewpoint. Diabetologia, 1997, 40, 487-495.	6.3	246
26	Glucose Inhibition of Glucagon Secretion From Rat β -Cells Is Mediated by GABA Released From Neighboring β -Cells. Diabetes, 2004, 53, 1038-1045.	0.6	246
27	Fast insulin secretion reflects exocytosis of docked granules in mouse pancreatic B-cells. Pflugers Archiv European Journal of Physiology, 2002, 444, 43-51.	2.8	245
28	Stimulus-secretion coupling in pancreatic β cells. Journal of Cellular Biochemistry, 1994, 55, 54-65.	2.6	234
29	SUR1 Regulates PKA-independent cAMP-induced Granule Priming in Mouse Pancreatic B-cells. Journal of General Physiology, 2003, 121, 181-197.	1.9	231
30	Cellular regulation of islet hormone secretion by the incretin hormone glucagon-like peptide 1. Pflugers Archiv European Journal of Physiology, 1998, 435, 583-594.	2.8	227
31	GLP-1 Inhibits and Adrenaline Stimulates Glucagon Release by Differential Modulation of N- and L-Type Ca ²⁺ Channel-Dependent Exocytosis. Cell Metabolism, 2010, 11, 543-553.	16.2	225
32	Fast Exocytosis with Few Ca ²⁺ Channels in Insulin-Secreting Mouse Pancreatic B Cells. Biophysical Journal, 2001, 81, 3308-3323.	0.5	223
33	Diabetes causes marked inhibition of mitochondrial metabolism in pancreatic β -cells. Nature Communications, 2019, 10, 2474.	12.8	223
34	KATP channels and islet hormone secretion: new insights and controversies. Nature Reviews Endocrinology, 2013, 9, 660-669.	9.6	221
35	Reversible changes in pancreatic islet structure and function produced by elevated blood glucose. Nature Communications, 2014, 5, 4639.	12.8	220
36	Regulation of PKD by the MAPK p38 β in Insulin Secretion and Glucose Homeostasis. Cell, 2009, 136, 235-248.	28.9	215

#	ARTICLE	IF	CITATIONS
37	Regulation of glucagon release in mouse $\hat{1}\beta$ cells by K ATP channels and inactivation of TTX-sensitive Na ⁺ channels. <i>Journal of Physiology</i> , 2000, 528, 509-520.	2.9	211
38	Impaired insulin secretion and glucose tolerance in $\hat{1}\beta$ cell-selective CaV1.2 Ca ²⁺ channel null mice. <i>EMBO Journal</i> , 2003, 22, 3844-3854.	7.8	205
39	Voltage-gated and resting membrane currents recorded from B-cells in intact mouse pancreatic islets. <i>Journal of Physiology</i> , 1999, 521, 717-728.	2.9	204
40	Reduced Insulin Exocytosis in Human Pancreatic $\hat{1}\beta$ -Cells With Gene Variants Linked to Type 2 Diabetes. <i>Diabetes</i> , 2012, 61, 1726-1733.	0.6	204
41	A KATP Channel-Dependent Pathway within $\hat{1}\beta$ Cells Regulates Glucagon Release from Both Rodent and Human Islets of Langerhans. <i>PLoS Biology</i> , 2007, 5, e143.	5.6	203
42	A Subset of 50 Secretory Granules in Close Contact With L-Type Ca ²⁺ Channels Accounts for First-Phase Insulin Secretion in Mouse $\hat{1}\beta$ -Cells. <i>Diabetes</i> , 2002, 51, S74-S82.	0.6	196
43	Rapid ATP-Dependent Priming of Secretory Granules Precedes Ca ²⁺ -Induced Exocytosis in Mouse Pancreatic B-Cells. <i>Journal of Physiology</i> , 1997, 503, 399-412.	2.9	195
44	Tight coupling between electrical activity and exocytosis in mouse glucagon-secreting alpha-cells. <i>Diabetes</i> , 2000, 49, 1500-1510.	0.6	195
45	Regulation of calcium in pancreatic $\hat{1}\beta$ - and $\hat{1}\delta$ -cells in health and disease. <i>Cell Calcium</i> , 2012, 51, 300-308.	2.4	195
46	PKC-Dependent Stimulation of Exocytosis by Sulfonylureas in Pancreatic beta Cells. <i>Science</i> , 1996, 271, 813-815.	12.6	194
47	Activation of protein kinases and inhibition of protein phosphatases play a central role in the regulation of exocytosis in mouse pancreatic beta cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1994, 91, 4343-4347.	7.1	192
48	$\hat{1}\beta$ -Aminobutyric Acid (GABA) Is an Autocrine Excitatory Transmitter in Human Pancreatic $\hat{1}\beta$ -Cells. <i>Diabetes</i> , 2010, 59, 1694-1701.	0.6	190
49	Increased activity of L-type Ca ²⁺ channels exposed to serum from patients with type I diabetes. <i>Science</i> , 1993, 261, 86-90.	12.6	186
50	Glucagon-Like Peptide 1(7-36) Amide Stimulates Exocytosis in Human Pancreatic $\hat{1}\beta$ -Cells by Both Proximal and Distal Regulatory Steps in Stimulus-Secretion Coupling. <i>Diabetes</i> , 1998, 47, 57-65.	0.6	179
51	Role of KATP Channels in Glucose-Regulated Glucagon Secretion and Impaired Counterregulation in Type 2 Diabetes. <i>Cell Metabolism</i> , 2013, 18, 871-882.	16.2	179
52	Delay between Fusion Pore Opening and Peptide Release from Large Dense-Core Vesicles in Neuroendocrine Cells. <i>Neuron</i> , 2002, 33, 287-299.	8.1	176
53	The Cell Physiology of Biphasic Insulin Secretion. <i>Physiology</i> , 2000, 15, 72-77.	3.1	175
54	An atlas and functional analysis of G-protein coupled receptors in human islets of Langerhans. , 2013, 139, 359-391.		168

#	ARTICLE	IF	CITATIONS
55	Isoform-specific regulation of mood behavior and pancreatic \hat{I}^2 cell and cardiovascular function by L-type Ca^{2+} channels. <i>Journal of Clinical Investigation</i> , 2004, 113, 1430-1439.	8.2	168
56	Neurotransmitter-Induced Inhibition of Exocytosis in Insulin-Secreting \hat{I}^2 Cells by Activation of Calcineurin. <i>Neuron</i> , 1996, 17, 513-522.	8.1	166
57	Inhibition of ATP-regulated K^+ channels precedes depolarization-induced increase in cytoplasmic free Ca^{2+} concentration in pancreatic beta-cells.. <i>Journal of Biological Chemistry</i> , 1987, 262, 5448-5454.	3.4	165
58	The somatostatin-secreting pancreatic \hat{I}^1 -cell in health and disease. <i>Nature Reviews Endocrinology</i> , 2018, 14, 404-414.	9.6	164
59	Priming of insulin granules for exocytosis by granular Cl^- uptake and acidification. <i>Journal of Cell Science</i> , 2001, 114, 2145-2154.	2.0	163
60	Novel aspects of the molecular mechanisms controlling insulin secretion. <i>Journal of Physiology</i> , 2008, 586, 3313-3324.	2.9	162
61	Regulation of glucagon secretion by glucose: paracrine, intrinsic or both?. <i>Diabetes, Obesity and Metabolism</i> , 2011, 13, 95-105.	4.4	160
62	Simultaneous recordings of glucose dependent electrical activity and ATP-regulated K^+ -currents in isolated mouse pancreatic \hat{I}^2 -cells. <i>FEBS Letters</i> , 1990, 261, 187-190.	2.8	159
63	Adrenaline Stimulates Glucagon Secretion in Pancreatic A-Cells by Increasing the Ca^{2+} Current and the Number of Granules Close to the L-Type Ca^{2+} Channels. <i>Journal of General Physiology</i> , 1997, 110, 217-228.	1.9	159
64	$CaV2.3$ calcium channels control second-phase insulin release. <i>Journal of Clinical Investigation</i> , 2005, 115, 146-154.	8.2	153
65	Modulation of dihydropyridine-sensitive Ca^{2+} channels by glucose metabolism in mouse pancreatic \hat{I}^2 -cells. <i>Nature</i> , 1989, 342, 550-553.	27.8	149
66	GLP-1 stimulates insulin secretion by PKC-dependent TRPM4 and TRPM5 activation. <i>Journal of Clinical Investigation</i> , 2015, 125, 4714-4728.	8.2	145
67	ATP-Sensitive K^+ Channel-Dependent Regulation of Glucagon Release and Electrical Activity by Glucose in Wild-Type and SUR1-/- Mouse \hat{A} -Cells. <i>Diabetes</i> , 2004, 53, S181-S189.	0.6	142
68	Priming of insulin granules for exocytosis by granular Cl^- uptake and acidification. <i>Journal of Cell Science</i> , 2001, 114, 2145-54.	2.0	138
69	Capacitance measurements of exocytosis in mouse pancreatic \hat{I}^1 -, \hat{I}^2 - and \hat{I}^3 -cells within intact islets of Langerhans. <i>Journal of Physiology</i> , 2004, 556, 711-726.	2.9	137
70	Steviol glycosides enhance pancreatic beta-cell function and taste sensation by potentiation of TRPM5 channel activity. <i>Nature Communications</i> , 2017, 8, 14733.	12.8	136
71	Inhibition of ATP-regulated K^+ channels precedes depolarization-induced increase in cytoplasmic free Ca^{2+} concentration in pancreatic beta-cells. <i>Journal of Biological Chemistry</i> , 1987, 262, 5448-54.	3.4	135
72	Inositol trisphosphate-dependent periodic activation of a Ca^{2+} -activated K^+ conductance in glucose-stimulated pancreatic \hat{I}^2 -cells. <i>Nature</i> , 1991, 353, 849-852.	27.8	134

#	ARTICLE	IF	CITATIONS
73	Activation by adrenaline of a low-conductance G protein-dependent K ⁺ channel in mouse pancreatic B cells. <i>Nature</i> , 1991, 349, 77-79.	27.8	133
74	Activation of Ca ²⁺ -Dependent K ⁺ Channels Contributes to Rhythmic Firing of Action Potentials in Mouse Pancreatic I ² Cells. <i>Journal of General Physiology</i> , 1999, 114, 759-770.	1.9	131
75	Chronic Palmitate Exposure Inhibits Insulin Secretion by Dissociation of Ca ²⁺ Channels from Secretory Granules. <i>Cell Metabolism</i> , 2009, 10, 455-465.	16.2	131
76	Glucagon-Like Peptide I Increases Cytoplasmic Calcium in Insulin-Secreting I ² TC3-Cells by Enhancement of Intracellular Calcium Mobilization. <i>Diabetes</i> , 1995, 44, 767-774.	0.6	130
77	Patch-clamp characterisation of somatostatin-secreting I ¹ cells in intact mouse pancreatic islets. <i>Journal of Physiology</i> , 2000, 528, 497-507.	2.9	130
78	ATP-sensitive K ⁺ channels: a link between B-cell metabolism and insulin secretion. <i>Biochemical Society Transactions</i> , 1990, 18, 109-111.	3.4	129
79	Selective nucleotide-release from dense-core granules in insulin-secreting cells. <i>Journal of Cell Science</i> , 2005, 118, 4271-4282.	2.0	129
80	Glutamate Acts as a Key Signal Linking Glucose Metabolism to Incretin/cAMP Action to Amplify Insulin Secretion. <i>Cell Reports</i> , 2014, 9, 661-673.	6.4	128
81	Release of small transmitters through kiss-and-run fusion pores in rat pancreatic I ² cells. <i>Cell Metabolism</i> , 2006, 4, 283-290.	16.2	127
82	Glucagon Stimulates Exocytosis in Mouse and Rat Pancreatic I [±] -Cells by Binding to Glucagon Receptors. <i>Molecular Endocrinology</i> , 2005, 19, 198-212.	3.7	121
83	SSTR2 is the functionally dominant somatostatin receptor in human pancreatic I ² - and I [±] -cells. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2012, 303, E1107-E1116.	3.5	119
84	Suppression of Insulin Release by Galanin and Somatostatin Is Mediated by a G-protein. <i>Journal of Biological Chemistry</i> , 1989, 264, 973-980.	3.4	119
85	Dual effects of glucose on the cytosolic Ca ²⁺ activity of mouse pancreatic I ² -cells. <i>FEBS Letters</i> , 1984, 170, 196-200.	2.8	118
86	Regulated Exocytosis of GABA-containing Synaptic-like Microvesicles in Pancreatic I ² -cells. <i>Journal of General Physiology</i> , 2004, 123, 191-204.	1.9	118
87	I ¹ cells and I ² cells are electrically coupled and regulate I [±] cell activity via somatostatin. <i>Journal of Physiology</i> , 2018, 596, 197-215.	2.9	117
88	Insulin inhibits glucagon release by SGLT2-induced stimulation of somatostatin secretion. <i>Nature Communications</i> , 2019, 10, 139.	12.8	117
89	Failure of Transplanted Bone Marrow Cells to Adopt a Pancreatic \hat{A} -Cell Fate. <i>Diabetes</i> , 2006, 55, 290-296.	0.6	112
90	Co-localization of L-type Ca ²⁺ channels and insulin-containing secretory granules and its significance for the initiation of exocytosis in mouse pancreatic B-cells. <i>EMBO Journal</i> , 1995, 14, 50-7.	7.8	112

#	ARTICLE	IF	CITATIONS
91	Membrane Potential-Dependent Inactivation of Voltage-Gated Ion Channels in β -Cells Inhibits Glucagon Secretion From Human Islets. <i>Diabetes</i> , 2010, 59, 2198-2208.	0.6	110
92	A dominant mutation in Snap25 causes impaired vesicle trafficking, sensorimotor gating, and ataxia in the blind-drunk mouse. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 2431-2436.	7.1	109
93	Failure of glucose to elicit a normal secretory response in fetal pancreatic beta cells results from glucose insensitivity of the ATP-regulated K^+ channels.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1989, 86, 4505-4509.	7.1	108
94	Glucagon secretion from pancreatic β -cells. <i>Upsala Journal of Medical Sciences</i> , 2016, 121, 113-119.	0.9	108
95	Voltage-activated currents in guinea pig pancreatic alpha 2 cells. Evidence for Ca^{2+} -dependent action potentials.. <i>Journal of General Physiology</i> , 1988, 91, 223-242.	1.9	105
96	Quantification of mRNA in single cells and modelling of RT-qPCR induced noise. <i>BMC Molecular Biology</i> , 2008, 9, 63.	3.0	104
97	Suppression of insulin release by galanin and somatostatin is mediated by a G-protein. An effect involving repolarization and reduction in cytoplasmic free Ca^{2+} concentration. <i>Journal of Biological Chemistry</i> , 1989, 264, 973-80.	3.4	104
98	Hormone-sensitive lipase, the rate-limiting enzyme in triglyceride hydrolysis, is expressed and active in beta-cells. <i>Diabetes</i> , 1999, 48, 228-232.	0.6	102
99	Single Ca channel currents in mouse pancreatic B-cells. <i>Pflugers Archiv European Journal of Physiology</i> , 1988, 412, 597-603.	2.8	101
100	Somatostatin inhibits exocytosis in rat pancreatic β -cells by G_{i2} -dependent activation of calcineurin and depriving of secretory granules. <i>Journal of Physiology</i> , 2001, 535, 519-532.	2.9	100
101	Glucagon-Like Peptide I and Glucose-Dependent Insulinotropic Polypeptide Stimulate Ca^{2+} -Induced Secretion in Rat β -Cells by a Protein Kinase A-Mediated Mechanism. <i>Diabetes</i> , 1997, 46, 792-800.	0.6	99
102	Phosphatidylinositol 4-kinase serves as a metabolic sensor and regulates priming of secretory granules in pancreatic β cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 5187-5192.	7.1	96
103	Loss of ZnT8 function protects against diabetes by enhanced insulin secretion. <i>Nature Genetics</i> , 2019, 51, 1596-1606.	21.4	96
104	R-type Ca^{2+} -channel-evoked CICR regulates glucose-induced somatostatin secretion. <i>Nature Cell Biology</i> , 2007, 9, 453-460.	10.3	95
105	Expression of an activating mutation in the gene encoding the KATP channel subunit Kir6.2 in mouse pancreatic β cells recapitulates neonatal diabetes. <i>Journal of Clinical Investigation</i> , 2009, 119, 80-90.	8.2	95
106	Corelease and Differential Exit via the Fusion Pore of GABA, Serotonin, and ATP from LDCV in Rat Pancreatic β Cells. <i>Journal of General Physiology</i> , 2007, 129, 221-231.	1.9	94
107	Uromodulin mutations causing familial juvenile hyperuricaemic nephropathy lead to protein maturation defects and retention in the endoplasmic reticulum. <i>Human Molecular Genetics</i> , 2009, 18, 2963-2974.	2.9	94
108	Cooling inhibits exocytosis in single mouse pancreatic β -cells by suppression of granule mobilization.. <i>Journal of Physiology</i> , 1996, 494, 41-52.	2.9	92

#	ARTICLE	IF	CITATIONS
109	Multisite regulation of insulin secretion by cAMP-increasing agonists: evidence that glucagon-like peptide 1 and glucagon act via distinct receptors. <i>Pflugers Archiv European Journal of Physiology</i> , 1997, 434, 515-524.	2.8	92
110	Type 2 diabetes mellitus: not quite exciting enough?. <i>Human Molecular Genetics</i> , 2004, 13, 21R-31.	2.9	90
111	Hyperglycaemia induces metabolic dysfunction and glycogen accumulation in pancreatic β^2 -cells. <i>Nature Communications</i> , 2016, 7, 13496.	12.8	90
112	Delayed rectifying and calcium-activated K ⁺ channels and their significance for action potential repolarization in mouse pancreatic beta-cells.. <i>Journal of General Physiology</i> , 1990, 95, 1041-1059.	1.9	88
113	pVHL is a regulator of glucose metabolism and insulin secretion in pancreatic β^2 cells. <i>Genes and Development</i> , 2008, 22, 3135-3146.	5.9	88
114	The insulinogenic effect of whey protein is partially mediated by a direct effect of amino acids and GIP on β^2 -cells. <i>Nutrition and Metabolism</i> , 2012, 9, 48.	3.0	88
115	Block of ATP-regulated and Ca ²⁺ -activated K ⁺ channels in mouse pancreatic beta-cells by external tetraethylammonium and quinine.. <i>Journal of Physiology</i> , 1990, 423, 327-342.	2.9	87
116	Glucagon-Like Peptide-1: Regulation of Insulin Secretion and Therapeutic Potential. <i>Basic and Clinical Pharmacology and Toxicology</i> , 2004, 95, 252-262.	2.5	87
117	Synaptotagmin β is a principal Ca ²⁺ sensor for Ca ²⁺ -induced glucagon exocytosis in pancreas. <i>Journal of Physiology</i> , 2009, 587, 1169-1178.	2.9	87
118	Muscle Dysfunction Caused by a K ^{ATP} Channel Mutation in Neonatal Diabetes Is Neuronal in Origin. <i>Science</i> , 2010, 329, 458-461.	12.6	87
119	Electrophysiology of pancreatic β^2 -cells in intact mouse islets of Langerhans. <i>Progress in Biophysics and Molecular Biology</i> , 2011, 107, 224-235.	2.9	87
120	KATP-channels and glucose-regulated glucagon secretion. <i>Trends in Endocrinology and Metabolism</i> , 2008, 19, 277-284.	7.1	86
121	CaM kinase II-dependent mobilization of secretory granules underlies acetylcholine-induced stimulation of exocytosis in mouse pancreatic B-cells. <i>Journal of Physiology</i> , 1999, 518, 745-759.	2.9	85
122	Palmitate Stimulation of Glucagon Secretion in Mouse Pancreatic β -Cells Results From Activation of L-Type Calcium Channels and Elevation of Cytoplasmic Calcium. <i>Diabetes</i> , 2004, 53, 2836-2843.	0.6	85
123	Long-Term Exposure to Glucose and Lipids Inhibits Glucose-Induced Insulin Secretion Downstream of Granule Fusion With Plasma Membrane. <i>Diabetes</i> , 2007, 56, 1888-1897.	0.6	83
124	Autocrine regulation of insulin secretion. <i>Diabetes, Obesity and Metabolism</i> , 2012, 14, 143-151.	4.4	83
125	Somatostatin release, electrical activity, membrane currents and exocytosis in human pancreatic delta cells. <i>Diabetologia</i> , 2009, 52, 1566-1578.	6.3	81
126	CaV2.3 calcium channels control second-phase insulin release. <i>Journal of Clinical Investigation</i> , 2005, 115, 146-154.	8.2	81

#	ARTICLE	IF	CITATIONS
127	Stimulation of the KATP channel by ADP and diazoxide requires nucleotide hydrolysis in mouse pancreatic beta-cells. <i>Journal of Physiology</i> , 1993, 463, 349-365.	2.9	80
128	Endocytosis of secretory granules in mouse pancreatic beta-cells evoked by transient elevation of cytosolic calcium. <i>Journal of Physiology</i> , 1996, 493, 755-767.	2.9	79
129	Cellular function in multicellular system for hormone-secretion: electrophysiological aspect of studies on δ -, β - and γ -cells of the pancreatic islet. <i>Neuroscience Research</i> , 2002, 42, 79-90.	1.9	79
130	Glucose-dependent regulation of rhythmic action potential firing in pancreatic β -cells by K_{ATP} channel modulation. <i>Journal of Physiology</i> , 2002, 545, 501-507.	2.9	79
131	Palmitate increases L-type Ca^{2+} currents and the size of the readily releasable granule pool in mouse pancreatic β -cells. <i>Journal of Physiology</i> , 2004, 557, 935-948.	2.9	79
132	The Effects of TAK-875, a Selective G Protein-Coupled Receptor 40/Free Fatty Acid 1 Agonist, on Insulin and Glucagon Secretion in Isolated Rat and Human Islets. <i>Journal of Pharmacology and Experimental Therapeutics</i> , 2012, 340, 483-489.	2.5	79
133	Ca^{2+} -induced Ca^{2+} release in insulin-secreting cells. <i>FEBS Letters</i> , 1992, 296, 287-291.	2.8	78
134	Na^{+} current properties in islet δ - and β -cells reflect cell-specific <i>Scn3a</i> and <i>Scn9a</i> expression. <i>Journal of Physiology</i> , 2014, 592, 4677-4696.	2.9	78
135	ATP-regulated potassium channels and voltage-gated calcium channels in pancreatic alpha and beta cells: similar functions but reciprocal effects on secretion. <i>Diabetologia</i> , 2014, 57, 1749-1761.	6.3	74
136	RFX6 Regulates Insulin Secretion by Modulating Ca^{2+} Homeostasis in Human β Cells. <i>Cell Reports</i> , 2014, 9, 2206-2218.	6.4	73
137	Characterisation of sulphonylurea and ATP-regulated K^{+} channels in rat pancreatic A-cells. <i>Pflugers Archiv European Journal of Physiology</i> , 1999, 438, 428-436.	2.8	72
138	δ -cell glucokinase suppresses glucose-regulated glucagon secretion. <i>Nature Communications</i> , 2018, 9, 546.	12.8	72
139	GLP-1 suppresses glucagon secretion in human pancreatic alpha-cells by inhibition of P/Q-type Ca^{2+} channels. <i>Physiological Reports</i> , 2018, 6, e13852.	1.7	71
140	CPT1a-Dependent Long-Chain Fatty Acid Oxidation Contributes to Maintaining Glucagon Secretion from Pancreatic Islets. <i>Cell Reports</i> , 2018, 23, 3300-3311.	6.4	71
141	PYY-Dependent Restoration of Impaired Insulin and Glucagon Secretion in Type 2 Diabetes following Roux-En-Y Gastric Bypass Surgery. <i>Cell Reports</i> , 2016, 15, 944-950.	6.4	70
142	Ca^{2+} channel clustering with insulin-containing granules is disturbed in type 2 diabetes. <i>Journal of Clinical Investigation</i> , 2017, 127, 2353-2364.	8.2	70
143	The First β -Carboxyglutamic Acid-containing Contryphan. <i>Journal of Biological Chemistry</i> , 2004, 279, 32453-32463.	3.4	69
144	Cell coupling in mouse pancreatic β -cells measured in intact islets of Langerhans. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008, 366, 3503-3523.	3.4	69

#	ARTICLE	IF	CITATIONS
145	Isoform-specific regulation of mood behavior and pancreatic \hat{I}^2 cell and cardiovascular function by L-type Ca^{2+} channels. <i>Journal of Clinical Investigation</i> , 2004, 113, 1430-1439.	8.2	69
146	The stimulatory action of tolbutamide on Ca^{2+} -dependent exocytosis in pancreatic \hat{A} cells is mediated by a 65-kDa mdr-like P-glycoprotein. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1999, 96, 5539-5544.	7.1	68
147	Oscillations, Intercellular Coupling, and Insulin Secretion in Pancreatic \hat{I}^2 Cells. <i>PLoS Biology</i> , 2006, 4, e49.	5.6	68
148	GABABreceptor activation inhibits exocytosis in rat pancreatic \hat{I}^2 -cells by G-protein-dependent activation of calcineurin. <i>Journal of Physiology</i> , 2004, 559, 397-409.	2.9	67
149	AP2 \hat{I}^f Mutations Impair Calcium-Sensing Receptor Trafficking and Signaling, and Show an Endosomal Pathway to Spatially Direct G-Protein Selectivity. <i>Cell Reports</i> , 2018, 22, 1054-1066.	6.4	66
150	CAPS1 and CAPS2 Regulate Stability and Recruitment of Insulin Granules in Mouse Pancreatic \hat{I}^2 Cells. <i>Cell Metabolism</i> , 2008, 7, 57-67.	16.2	65
151	Synaptotagmin-7 phosphorylation mediates GLP-1 \hat{a} dependent potentiation of insulin secretion from \hat{I}^2 -cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 9996-10001.	7.1	65
152	PYY plays a key role in the resolution of diabetes following bariatric surgery in humans. <i>EBioMedicine</i> , 2019, 40, 67-76.	6.1	65
153	Defective regulation of the cytosolic Ca^{2+} activity in parathyroid cells from patients with hyperparathyroidism. <i>Bioscience Reports</i> , 1984, 4, 909-915.	2.4	64
154	Effects of external tetraethylammonium ions and quinine on delayed rectifying K^+ channels in mouse pancreatic beta-cells.. <i>Journal of Physiology</i> , 1990, 423, 311-325.	2.9	64
155	Ca^{2+} and GTP dependent exocytosis in mouse pancreatic beta cells involves both common and distinct steps.. <i>Journal of Physiology</i> , 1996, 496, 255-264.	2.9	64
156	Extracellular ATP increases cytoplasmic free Ca^{2+} concentration in clonal insulin-producing RINm5F cells. A mechanism involving direct interaction with both release and refilling of the inositol 1,4,5-trisphosphate-sensitive Ca^{2+} pool. <i>Biochemical Journal</i> , 1990, 265, 203-211.	3.7	63
157	Characterisation of sulphonylurea and ATP-regulated K^+ channels in rat pancreatic A-cells. <i>Pflugers Archiv European Journal of Physiology</i> , 1999, 438, 428-436.	2.8	63
158	Calcium increases endocytotic vesicle size and accelerates membrane fission in insulin-secreting INS-1 cells. <i>Journal of Cell Science</i> , 2005, 118, 5911-5920.	2.0	63
159	Regulated Exocytosis and Kiss-and-Run of Synaptic-Like Microvesicles in INS-1 and Primary Rat \hat{A} -Cells. <i>Diabetes</i> , 2005, 54, 736-743.	0.6	63
160	Progression of Diet-Induced Diabetes in C57BL6J Mice Involves Functional Dissociation of Ca^{2+} Channels From Secretory Vesicles. <i>Diabetes</i> , 2010, 59, 1192-1201.	0.6	63
161	Inhibition of glucose-stimulated insulin release by alpha 2-adrenoceptor activation is paralleled by both a repolarization and a reduction in cytoplasmic free Ca^{2+} concentration.. <i>Journal of Biological Chemistry</i> , 1988, 263, 1855-1860.	3.4	62
162	Adrenaline Stimulates Glucagon Secretion by Tpc2-Dependent Ca^{2+} Mobilization From Acidic Stores in Pancreatic \hat{I}^2 -Cells. <i>Diabetes</i> , 2018, 67, 1128-1139.	0.6	61

#	ARTICLE	IF	CITATIONS
163	Defective Secretion of Islet Hormones in Chromogranin-B Deficient Mice. <i>PLoS ONE</i> , 2010, 5, e8936.	2.5	61
164	Galanin and the endocrine pancreas. <i>FEBS Letters</i> , 1988, 229, 233-237.	2.8	59
165	Stimulation of cloned human glucagon-like peptide 1 receptor expressed in HEK 293 cells induces cAMP-dependent activation of calcium-induced calcium release. <i>FEBS Letters</i> , 1995, 373, 182-186.	2.8	59
166	Type 2 diabetes risk alleles in PAM impact insulin release from human pancreatic β^2 -cells. <i>Nature Genetics</i> , 2018, 50, 1122-1131.	21.4	59
167	Type 2 Diabetes Susceptibility Gene <i>TCF7L2</i> and Its Role in β^2 -Cell Function. <i>Diabetes</i> , 2009, 58, 800-802.	0.6	58
168	Fumarate Hydratase Deletion in Pancreatic β^2 Cells Leads to Progressive Diabetes. <i>Cell Reports</i> , 2017, 20, 3135-3148.	6.4	57
169	Dysregulation of Glucagon Secretion by Hyperglycemia-Induced Sodium-Dependent Reduction of ATP Production. <i>Cell Metabolism</i> , 2019, 29, 430-442.e4.	16.2	57
170	CLC-5 and KIF3B interact to facilitate CLC-5 plasma membrane expression, endocytosis, and microtubular transport: relevance to pathophysiology of Dent's disease. <i>American Journal of Physiology - Renal Physiology</i> , 2010, 298, F365-F380.	2.7	56
171	Inhibition of glucose-stimulated insulin release by alpha 2-adrenoceptor activation is paralleled by both a repolarization and a reduction in cytoplasmic free Ca ²⁺ concentration. <i>Journal of Biological Chemistry</i> , 1988, 263, 1855-60.	3.4	56
172	Co-localisation of the Kir6.2/SUR1 channel complex with glucagon-like peptide-1 and glucose-dependent insulinotropic polypeptide expression in human ileal cells and implications for glycaemic control in new onset type 1 diabetes. <i>European Journal of Endocrinology</i> , 2007, 156, 663-671.	3.7	55
173	Increased Expression of the Diabetes Gene <i>SOX4</i> Reduces Insulin Secretion by Impaired Fusion Pore Expansion. <i>Diabetes</i> , 2016, 65, 1952-1961.	0.6	55
174	Cytoplasmic calcium transients due to single action potentials and voltage-clamp depolarizations in mouse pancreatic B-cells. <i>EMBO Journal</i> , 1992, 11, 2877-2884.	7.8	54
175	Molecular Defects in Insulin Secretion in Type-2 Diabetes. <i>Reviews in Endocrine and Metabolic Disorders</i> , 2004, 5, 135-142.	5.7	54
176	A method for the generation of human stem cell-derived alpha cells. <i>Nature Communications</i> , 2020, 11, 2241.	12.8	54
177	The Ins and Outs of Secretion from Pancreatic β^2 -Cells: Control of Single-Vesicle Exo- and Endocytosis. <i>Physiology</i> , 2007, 22, 113-121.	3.1	52
178	Reduction of the cytosolic calcium activity in clonal insulin-releasing cells exposed to glucose. <i>Bioscience Reports</i> , 1983, 3, 939-946.	2.4	51
179	Cyclic AMP potentiates glucose-induced insulin release from mouse pancreatic islets without increasing cytosolic free Ca ²⁺ . <i>Acta Physiologica Scandinavica</i> , 1985, 125, 639-647.	2.2	51
180	Voltage-activated Na ⁺ currents and their suppression by phorbol ester in clonal insulin-producing RINm5F cells. <i>American Journal of Physiology - Cell Physiology</i> , 1986, 251, C912-C919.	4.6	51

#	ARTICLE	IF	CITATIONS
181	Separate processes mediate nucleotide-induced inhibition and stimulation of the ATP-regulated K ⁺ channels in mouse pancreatic β -cells. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 1991, 243, 139-144.	2.6	51
182	Sulfonylurea-Mediated Stimulation of Insulin Exocytosis via an ATP-Sensitive K ⁺ Channel-Independent Action. <i>Diabetes</i> , 2002, 51, S33-S36.	0.6	51
183	Kiss-and-run exocytosis and fusion pores of secretory vesicles in human β -cells. <i>Pflugers Archiv European Journal of Physiology</i> , 2009, 457, 1343-1350.	2.8	51
184	Exocytotic Properties of Human Pancreatic β -cells. <i>Annals of the New York Academy of Sciences</i> , 2009, 1152, 187-193.	3.8	51
185	Key Matrix Proteins Within the Pancreatic Islet Basement Membrane Are Differentially Digested During Human Islet Isolation. <i>American Journal of Transplantation</i> , 2017, 17, 451-461.	4.7	50
186	“Take Me To Your Leader” An Electrophysiological Appraisal of the Role of Hub Cells in Pancreatic Islets. <i>Diabetes</i> , 2020, 69, 830-836.	0.6	50
187	Mitochondrial matrix pH controls oxidative phosphorylation and metabolism-secretion coupling in INS-1 clonal β cells. <i>FASEB Journal</i> , 2010, 24, 4613-4626.	0.5	49
188	Nicotinic Acid Adenine Dinucleotide Phosphate (NAADP) and Endolysosomal Two-pore Channels Modulate Membrane Excitability and Stimulus-Secretion Coupling in Mouse Pancreatic β Cells. <i>Journal of Biological Chemistry</i> , 2015, 290, 21376-21392.	3.4	48
189	Significance of Na/Ca Exchange for Ca ²⁺ Buffering and Electrical Activity in Mouse Pancreatic β -Cells. <i>Biophysical Journal</i> , 1999, 76, 2018-2028.	0.5	46
190	Gs/Gq signaling switch in β cells defines incretin effectiveness in diabetes. <i>Journal of Clinical Investigation</i> , 2020, 130, 6639-6655.	8.2	46
191	Suppression of Sulfonylurea- and Glucose-Induced Insulin Secretion In Vitro and In Vivo in Mice Lacking the Chloride Transport Protein ClC-3. <i>Cell Metabolism</i> , 2009, 10, 309-315.	16.2	45
192	Functional identification of islet cell types by electrophysiological fingerprinting. <i>Journal of the Royal Society Interface</i> , 2017, 14, 20160999.	3.4	45
193	Depolarization-independent net uptake of calcium into clonal insulin-releasing cells exposed to glucose. <i>Bioscience Reports</i> , 1983, 3, 927-937.	2.4	42
194	Regulation of glucagon release from pancreatic A-cells. <i>Biochemical Pharmacology</i> , 1991, 41, 1783-1790.	4.4	42
195	G protein-dependent inhibition of L-type Ca ²⁺ currents by acetylcholine in mouse pancreatic β -cells. <i>Journal of Physiology</i> , 1997, 499, 65-76.	2.9	42
196	Does galanin inhibit insulin secretion by opening of the ATP-regulated K ⁺ channel in the β -cell?. <i>Peptides</i> , 1989, 10, 453-457.	2.4	41
197	Two types of Ca ²⁺ currents with different sensitivities to organic Ca ²⁺ channel antagonists in guinea pig pancreatic alpha 2 cells. <i>Journal of General Physiology</i> , 1988, 91, 243-254.	1.9	39
198	Measurements of cytoplasmic free Ca ²⁺ concentration in human pancreatic islets and insulinoma cells. <i>FEBS Letters</i> , 1991, 291, 310-314.	2.8	39

#	ARTICLE	IF	CITATIONS
199	Electrophysiological properties of human beta-cell lines EndoC- β H1 and - β H2 conform with human beta-cells. <i>Scientific Reports</i> , 2018, 8, 16994.	3.3	39
200	Reduced somatostatin signalling leads to hypersecretion of glucagon in mice fed a high-fat diet. <i>Molecular Metabolism</i> , 2020, 40, 101021.	6.5	39
201	Heterogenous impairment of β cell function in type 2 diabetes is linked to cell maturation state. <i>Cell Metabolism</i> , 2022, 34, 256-268.e5.	16.2	39
202	Large dense-core vesicle exocytosis in pancreatic β -cells monitored by capacitance measurements. <i>Methods</i> , 2004, 33, 302-311.	3.8	38
203	Impaired Insulin Exocytosis in Neural Cell Adhesion Molecule $^{-/-}$ Mice Due to Defective Reorganization of the Submembrane F-Actin Network. <i>Endocrinology</i> , 2009, 150, 3067-3075.	2.8	37
204	Glucose-induced increase in cytoplasmic pH in pancreatic beta-cells is mediated by Na ⁺ /H ⁺ exchange, an effect not dependent on protein kinase C. <i>Journal of Biological Chemistry</i> , 1991, 266, 23537-23541.	3.4	37
205	Antibody inhibition of synaptosomal protein of 25 kDa (SNAP-25) and syntaxin 1 reduces rapid exocytosis in insulin-secreting cells. <i>Journal of Molecular Endocrinology</i> , 2006, 36, 503-515.	2.5	36
206	β Cell Dysfunction in Type 2 Diabetes: Drained of Energy?. <i>Cell Metabolism</i> , 2019, 29, 1-2.	16.2	36
207	Multivesicular exocytosis in rat pancreatic beta cells. <i>Diabetologia</i> , 2012, 55, 1001-1012.	6.3	35
208	Calcium and pancreatic β -cell function XI. Modification of ⁴⁵ Ca fluxes by Na ⁺ removal. <i>Biochemical Medicine</i> , 1980, 24, 143-152.	0.5	33
209	Direct measurements of increased free cytoplasmic Ca ²⁺ in mouse pancreatic β -cells following stimulation by hypoglycemic sulfonylureas. <i>FEBS Letters</i> , 1985, 190, 21-24.	2.8	33
210	GPRC5B a putative glutamate-receptor candidate is negative modulator of insulin secretion. <i>Biochemical and Biophysical Research Communications</i> , 2013, 441, 643-648.	2.1	33
211	Protein kinase C activity affects glucose-induced oscillations in cytoplasmic free Ca ²⁺ in the pancreatic B-cell. <i>FEBS Letters</i> , 1992, 303, 85-90.	2.8	32
212	Long-term exposure of mouse pancreatic islets to oleate or palmitate results in reduced glucose-induced somatostatin and oversecretion of glucagon. <i>Diabetologia</i> , 2008, 51, 1689-1693.	6.3	32
213	Quantal ATP release in rat β -cells by exocytosis of insulin-containing LDCVs. <i>Pflugers Archiv European Journal of Physiology</i> , 2009, 458, 389-401.	2.8	32
214	Glucagon-like peptide 1 (7-36) amide stimulates exocytosis in human pancreatic beta-cells by both proximal and distal regulatory steps in stimulus-secretion coupling. <i>Diabetes</i> , 1998, 47, 57-65.	0.6	32
215	Expression of voltage-gated K ⁺ channels in insulin-producing cells. <i>FEBS Letters</i> , 1990, 263, 121-126.	2.8	31
216	New Insights into the Regulation of Glucagon Secretion by Glucagon-like Peptide-1. <i>Hormone and Metabolic Research</i> , 2004, 36, 822-829.	1.5	31

#	ARTICLE	IF	CITATIONS
217	Hormone-Sensitive Lipase Deficiency in Mouse Islets Abolishes Neutral Cholesterol Ester Hydrolase Activity but Leaves Lipolysis, Acylglycerides, Fat Oxidation, and Insulin Secretion Intact. <i>Endocrinology</i> , 2004, 145, 3746-3753.	2.8	31
218	Mutant Mice With Calcium-Sensing Receptor Activation Have Hyperglycemia That Is Rectified by Calcilytic Therapy. <i>Endocrinology</i> , 2017, 158, 2486-2502.	2.8	31
219	Manganese accumulation in pancreatic β -cells and its stimulation by glucose. <i>Biochemical Journal</i> , 1982, 202, 435-444.	3.1	30
220	Tolbutamide stimulates exocytosis of glucagon by inhibition of a mitochondrial-like ATP-sensitive K ⁺ (K _{TJ}) channel. <i>Journal of Biological Chemistry</i> , 1990, 265, 10000-10004.	2.9	30
221	A role of PLC/PKC-dependent pathway in GLP-1-stimulated insulin secretion. <i>Journal of Molecular Medicine</i> , 2017, 95, 361-368.	3.9	30
222	Anti-diabetic action of all-trans retinoic acid and the orphan G protein coupled receptor GPRC5C in pancreatic β -cells. <i>Endocrine Journal</i> , 2017, 64, 325-338.	1.6	30
223	Nanoscale Amperometry Reveals that Only a Fraction of Vesicular Serotonin Content is Released During Exocytosis from Beta Cells. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7593-7596.	13.8	30
224	Enhanced stimulus-secretion coupling in polyamine-depleted rat insulinoma cells. An effect involving increased cytoplasmic Ca ²⁺ , inositol phosphate generation, and phorbol ester sensitivity.. <i>Journal of Clinical Investigation</i> , 1993, 92, 1910-1917.	8.2	30
225	Glucagon-like peptide I and glucose-dependent insulinotropic polypeptide stimulate Ca ²⁺ -induced secretion in rat alpha-cells by a protein kinase A-mediated mechanism. <i>Diabetes</i> , 1997, 46, 792-800.	0.6	29
226	Glucose-induced increase in cytoplasmic pH in pancreatic beta-cells is mediated by Na ⁺ /H ⁺ exchange, an effect not dependent on protein kinase C. <i>Journal of Biological Chemistry</i> , 1991, 266, 23537-41.	3.4	29
227	Gi2 proteins couple somatostatin receptors to low-conductance K ⁺ channels in rat pancreatic δ -cells. <i>Pflügers Archiv European Journal of Physiology</i> , 2001, 442, 19-26.	2.8	28
228	Desensitization of glucagon-like peptide 1 receptors in insulin-secreting β TC3 cells: role of PKA-independent mechanisms. <i>British Journal of Pharmacology</i> , 1996, 118, 769-775.	5.4	27
229	The two pore channel TPC2 is dispensable in pancreatic β -cells for normal Ca ²⁺ dynamics and insulin secretion. <i>Cell Calcium</i> , 2016, 59, 32-40.	2.4	26
230	Somatostatin secretion by Na ⁺ -dependent Ca ²⁺ -induced Ca ²⁺ release in pancreatic delta cells. <i>Nature Metabolism</i> , 2020, 2, 32-40.	11.9	26
231	Cytoplasmic calcium transients due to single action potentials and voltage-clamp depolarizations in mouse pancreatic B-cells. <i>EMBO Journal</i> , 1992, 11, 2877-84.	7.8	26
232	Direct evidence for opposite effects of D-glucose and D-glyceraldehyde on cytoplasmic pH of mouse pancreatic β -cells. <i>Bioscience Reports</i> , 1986, 6, 355-361.	2.4	25
233	Alpha2-adrenoreceptor stimulation does not inhibit L-type calcium channels in mouse pancreatic β -cells. <i>Bioscience Reports</i> , 1991, 11, 147-157.	2.4	25
234	Compound exocytosis in voltage-clamped mouse pancreatic β -cells revealed by carbon fibre amperometry. <i>Pflügers Archiv European Journal of Physiology</i> , 2000, 439, 634-645.	2.8	25

#	ARTICLE	IF	CITATIONS
235	A Central Small Amino Acid in the VAMP2 Transmembrane Domain Regulates the Fusion Pore in Exocytosis. <i>Scientific Reports</i> , 2017, 7, 2835.	3.3	25
236	Compound exocytosis in voltage-clamped mouse pancreatic \hat{I}^2 -cells revealed by carbon fibre amperometry. <i>Pflugers Archiv European Journal of Physiology</i> , 2000, 439, 634-645.	2.8	24
237	Pathophysiological, Genetic and Gene Expression Features of a Novel Rodent Model of the Cardio-Metabolic Syndrome. <i>PLoS ONE</i> , 2008, 3, e2962.	2.5	24
238	SEDLIN Forms Homodimers: Characterisation of SEDLIN Mutations and Their Interactions with Transcription Factors MBP1, PITX1 and SF1. <i>PLoS ONE</i> , 2010, 5, e10646.	2.5	23
239	Angular Approach Scanning Ion Conductance Microscopy. <i>Biophysical Journal</i> , 2016, 110, 2252-2265.	0.5	23
240	Glucagon-like peptide I increases cytoplasmic calcium in insulin-secreting beta TC3-cells by enhancement of intracellular calcium mobilization. <i>Diabetes</i> , 1995, 44, 767-774.	0.6	23
241	The interaction between manganese and calcium fluxes in pancreatic \hat{I}^2 -cells. <i>Biochemical Journal</i> , 1983, 210, 307-314.	3.1	21
242	TCF7L2 and Diabetes: A Tale of Two Tissues, and of Two Species. <i>Cell Metabolism</i> , 2013, 17, 157-159.	16.2	21
243	\hat{I}^2 -cell secretory dysfunction: a key cause of type 2 diabetes. <i>Lancet Diabetes and Endocrinology</i> , the, 2020, 8, 370.	11.4	21
244	Glucose stimulates the entry of Ca^{2+} into the insulin-producing \hat{I}^2 cells but not into the glucagon-producing \hat{I}^2 cells. <i>Acta Physiologica Scandinavica</i> , 1987, 131, 230-234.	2.2	20
245	Review: Insulin secretion: function and therapy of pancreatic beta-cells in diabetes. <i>British Journal of Diabetes and Vascular Disease</i> , 2005, 5, 187-191.	0.6	20
246	High-content screening identifies a role for Na^{+} channels in insulin production. <i>Royal Society Open Science</i> , 2015, 2, 150306.	2.4	20
247	Arginine-vasopressin mediates counter-regulatory glucagon release and is diminished in type 1 diabetes. <i>ELife</i> , 2021, 10, .	6.0	20
248	Demonstration of A-currents in pancreatic islet cells. <i>Pflugers Archiv European Journal of Physiology</i> , 1989, 413, 441-443.	2.8	19
249	Calcium Currents in Insulin-Secreting \hat{I}^2 -Cells. <i>Annals of the New York Academy of Sciences</i> , 1989, 560, 403-409.	3.8	19
250	Single Calcium Channel Activity in Mouse Pancreatic \hat{I}^2 -Cells. <i>Annals of the New York Academy of Sciences</i> , 1989, 560, 410-412.	3.8	19
251	Demonstration of a novel apamin-insensitive calcium-activated K^{+} channel in mouse pancreatic B cells. <i>Pflugers Archiv European Journal of Physiology</i> , 1993, 422, 443-448.	2.8	19
252	Enhancement of glucagon secretion in mouse and human pancreatic alpha cells by protein kinase C (PKC) involves intracellular trafficking of PKC^{\pm} and PKC^{\prime} . <i>Diabetologia</i> , 2010, 53, 717-729.	6.3	19

#	ARTICLE	IF	CITATIONS
253	Fusion pore in exocytosis: More than an exit gate? A β -cell perspective. <i>Cell Calcium</i> , 2017, 68, 45-61.	2.4	19
254	Short-term high glucose culture potentiates pancreatic beta cell function. <i>Scientific Reports</i> , 2018, 8, 13061.	3.3	19
255	Glucose stimulates somatostatin secretion in pancreatic β -cells by cAMP-dependent intracellular Ca^{2+} release. <i>Journal of General Physiology</i> , 2019, 151, 1094-1115.	1.9	19
256	NALCN: a regulated leak channel. <i>EMBO Reports</i> , 2009, 10, 963-964.	4.5	18
257	Expression of K channels in <i>Xenopus laevis</i> oocytes injected with poly(A ⁺) mRNA from the insulin-secreting β -cell line, HIT T15. <i>FEBS Letters</i> , 1988, 239, 185-189.	2.8	17
258	Perchlorate stimulates insulin secretion by shifting the gating of L-type Ca^{2+} currents in mouse pancreatic B-cells towards negative potentials. <i>Pflügers Archiv European Journal of Physiology</i> , 2001, 441, 587-595.	2.8	17
259	Monitoring real-time hormone release kinetics via high-content 3-D imaging of compensatory endocytosis. <i>Lab on A Chip</i> , 2018, 18, 2838-2848.	6.0	17
260	Inhibition of L-type calcium channels by internal GTP [S] in mouse pancreatic β cells. <i>Pflügers Archiv European Journal of Physiology</i> , 1992, 420, 72-77.	2.8	16
261	Imidazoline NNC77-0074 stimulates insulin secretion and inhibits glucagon release by control of Ca^{2+} -dependent exocytosis in pancreatic β - and δ -cells. <i>European Journal of Pharmacology</i> , 2003, 466, 213-221.	3.5	16
262	Insulin Secretion. <i>Journal of General Physiology</i> , 2004, 124, 623-625.	1.9	16
263	The Insulin Receptor Talks to Glucagon?. <i>Cell Metabolism</i> , 2009, 9, 303-305.	16.2	16
264	Exocytosis from pancreatic β -cells: mathematical modelling of the exit of low-molecular-weight granule content. <i>Interface Focus</i> , 2011, 1, 143-152.	3.0	16
265	“Resistance is futile” paradoxical inhibitory effects of K ATP channel closure in glucagon-secreting δ -cells. <i>Journal of Physiology</i> , 2020, 598, 4765-4780.	2.9	16
266	Insulinotropic action of AICA riboside. II. Secretory, metabolic and cationic aspects. <i>Diabetes Research</i> , 1994, 25, 25-37.	0.1	16
267	Inhibition of ATP-regulated K ⁺ -channels by a photoactivatable ATP-analogue in mouse pancreatic β -cells. <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , 1991, 1092, 347-349.	4.1	14
268	Glutamate primes the pump. <i>Nature</i> , 1999, 402, 595-596.	27.8	14
269	Peripancreatic adipose tissue protects against high-fat-diet-induced hepatic steatosis and insulin resistance in mice. <i>International Journal of Obesity</i> , 2020, 44, 2323-2334.	3.4	14
270	A Variation on the Theme: SGLT2 Inhibition and Glucagon Secretion in Human Islets. <i>Diabetes</i> , 2020, 69, 864-866.	0.6	14

#	ARTICLE	IF	CITATIONS
271	Cell-cell communication between adipocytes and pancreatic β -cells in acoustically levitated droplets. <i>Integrative Biology</i> (United Kingdom), 2009, 1, 595.	1.3	13
272	Ion channels, electrical activity and insulin secretion. <i>Diabète & Métabolisme</i> , 1994, 20, 138-45.	0.3	13
273	The glucagon-producing alpha cell: an electrophysiologically exceptional cell. <i>Diabetologia</i> , 2010, 53, 1827-1830.	6.3	12
274	Per-arnt-sim (PAS) domain kinase (PASK) as a regulator of glucagon secretion. <i>Diabetologia</i> , 2011, 54, 719-721.	6.3	12
275	The vascular architecture of the pancreatic islets: A homage to August Krogh. <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2021, 252, 110846.	1.8	12
276	Glucose-responsive beta cells in islets isolated from a patient with long-standing type 1 diabetes mellitus. <i>Diabetologia</i> , 2011, 54, 200-202.	6.3	11
277	Incretin hormones, insulin, glucagon and advanced glycation end products in relation to cognitive function in older people with and without diabetes, a population-based study. <i>Diabetic Medicine</i> , 2020, 37, 1157-1166.	2.3	11
278	Nanoscale Amperometry Reveals that Only a Fraction of Vesicular Serotonin Content is Released During Exocytosis from Beta Cells. <i>Angewandte Chemie</i> , 2021, 133, 7671-7674.	2.0	11
279	Neuropeptides in the Regulation of Islet Hormone Secretion - Localization, Effects and Mode of Action. <i>Advances in Experimental Medicine and Biology</i> , 1991, 291, 129-142.	1.6	11
280	Ca ²⁺ Transport in Pancreatic β -Cells during Glucose Stimulation of Insulin Secretion. <i>Upsala Journal of Medical Sciences</i> , 1980, 85, 321-329.	0.9	9
281	Direct determination of manganese in microgram amounts of pancreatic tissue by electrothermal atomic absorption spectrometry. <i>Analytica Chimica Acta</i> , 1982, 140, 325-329.	5.4	9
282	Intracellular pH, cytosolic calcium concentration and electrical activity in RINm5F insulinoma cells. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1994, 1192, 107-111.	2.6	9
283	The Riddle of Formycin A Insulinotropic Action. <i>Biochemical and Molecular Medicine</i> , 1996, 57, 47-63.	1.4	9
284	Response to Comment on Satin et al. "Take Me To Your Leader": An Electrophysiological Appraisal of the Role of Hub Cells in Pancreatic Islets. <i>Diabetes</i> 2020;69:830-836. <i>Diabetes</i> , 2020, 69, e12-e13.	0.6	9
285	Intracellular pH and the stimulus-secretion coupling in insulin-producing RINm5F cells. <i>Biochemical Journal</i> , 1992, 287, 59-66.	3.7	8
286	Demonstration of Voltage-Dependent and TTX-Sensitive Na ⁺ -Channels in Human Melanocytes. <i>Pigment Cell & Melanoma Research</i> , 1994, 7, 333-338.	3.6	8
287	Nateglinide, but not repaglinide, stimulates growth hormone release in rat pituitary cells by inhibition of K channels and stimulation of cyclic AMP-dependent exocytosis. <i>European Journal of Endocrinology</i> , 2002, 147, 133-142.	3.7	8
288	Release of insulin granules by simultaneous, high-speed correlative SICM-FCM. <i>Journal of Microscopy</i> , 2021, 282, 21-29.	1.8	8

#	ARTICLE	IF	CITATIONS
289	Calcium and Potassium Currents Recorded from Pancreatic β -Cells Under Voltage Clamp Control. <i>Advances in Experimental Medicine and Biology</i> , 1986, 211, 167-175.	1.6	8
290	Acetyl-CoA-carboxylase 1 (ACC1) plays a critical role in glucagon secretion. <i>Communications Biology</i> , 2022, 5, 238.	4.4	8
291	Mechanisms of action of entero-insular hormones and neural input on the insulin secretory process. <i>Biochemical Society Transactions</i> , 1990, 18, 119-122.	3.4	7
292	Biphasic voltage-dependent inactivation of human Na^+ channels expressed in rodent insulin-secreting cells. <i>Journal of Physiology</i> , 2018, 596, 1601-1626.	2.9	6
293	EFFECTS OF CATIONIC MODIFICATION ON SUPERFICIAL BINDING AND INTRACELLULAR ^{45}Ca UPTAKE BY DECAPSULATED MOUSE PANCREATIC ISLETS. <i>Biomedical Research</i> , 1987, 8, 153-159.	0.9	5
294	Molecular mechanism underlying glucagon-like peptide 1 induced calcium mobilization from internal stores in insulin-secreting β TC3 cells. <i>Acta Physiologica Scandinavica</i> , 1996, 157, 349-351.	2.2	4
295	Dramatis Personae in β -Cell Mass Regulation: Enter SerpinB1. <i>Cell Metabolism</i> , 2016, 23, 8-10.	16.2	4
296	Improving the physiological realism of experimental models. <i>Interface Focus</i> , 2016, 6, 20150076.	3.0	4
297	Glucose in glucagon release. <i>Nature</i> , 1990, 344, 716-716.	27.8	3
298	Interaction with the inositol 1,4,5-trisphosphate receptor promotes Ca^{2+} sequestration in permeabilised insulin-secreting cells. <i>FEBS Letters</i> , 1991, 288, 27-29.	2.8	3
299	Dynamics of the cationic, bioelectrical and secretory responses to formycin A in pancreatic islet cells. <i>Pflügers Archiv European Journal of Physiology</i> , 1996, 431, 353-362.	2.8	3
300	Regulation of Insulin Granule Exocytosis. , 2008, , 147-176.		3
301	Reducing hyperglucagonaemia in type 2 diabetes using low-dose glibenclamide: Results of the LEGEND pilot study. <i>Diabetes, Obesity and Metabolism</i> , 2022, 24, 1671-1675.	4.4	3
302	Secretory and electrophysiological characteristics of insulin cells from gastrectomized mice: Evidence for the existence of insulinotropic agents in the stomach. <i>Regulatory Peptides</i> , 2007, 139, 31-38.	1.9	2
303	MEASUREMENTS OF CYTOPLASMIC pH IN INSULIN-RELEASING CELLS WITH INTRACELLULARLY TRAPPED PHENOL RED. <i>Biomedical Research</i> , 1986, 7, 139-144.	0.9	1
304	Measurements of membrane potential, transmembrane ^{45}Ca fluxes, cytoplasmic free Ca^{2+} concentration and insulin release by transplantable rat insulinoma cells maintained in tissue culture. <i>British Journal of Cancer</i> , 1988, 58, 22-29.	6.4	1
305	Electrical bursting in islet β cells. <i>Nature</i> , 1992, 357, 28-28.	27.8	1
306	Matthias Braun, 23 July 1966–16 November 2013. <i>Diabetologia</i> , 2014, 57, 2431-2432.	6.3	0

#	ARTICLE	IF	CITATIONS
307	Action of Incretins on the Pancreatic β Cell: Control of Glucagon Secretion. , 2015, , 79-97.		0
308	Type-2 Diabetes - A Fusion Pore Disease?. Biophysical Journal, 2018, 114, 10a.	0.5	0
309	Galanin inhibits β -cell electrical activity by a G-protein-regulated sulphonylurea-insensitive mechanism. , 1991, , 237-245.		0
310	Components of insulin secretion: lessons to be learnt from capacitance. The Japanese Journal of Physiology, 1997, 47 Suppl 1, S21.	0.9	0