

# Guy A Rutter

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

336  
papers

16,794  
citations

73  
h-index

113  
g-index

369  
ext. papers

19,160  
ext. citations

6.3  
avg, IF

6.84  
L-index

#	Paper	IF	Citations
336	Destabilization of $\beta$ Cell FIT2 by saturated fatty acids alter lipid droplet numbers and contribute to ER stress and diabetes.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119, e2113074119	11.5	1
335	Opposing effects on regulated insulin secretion of acute vs chronic stimulation of AMP-activated protein kinase.. <i>Diabetologia</i> , <b>2022</b> , 65, 997	10.3	
334	Autotaxin signaling facilitates $\beta$ cell dedifferentiation and dysfunction induced by Sirtuin 3 deficiency.. <i>Molecular Metabolism</i> , <b>2022</b> , 101493	8.8	0
333	Homocysteine Metabolism Pathway Is Involved in the Control of Glucose Homeostasis: A Cystathionine Beta Synthase Deficiency Study in Mouse. <i>Cells</i> , <b>2022</b> , 11, 1737	7.9	2
332	Consequences for Pancreatic $\beta$ Cell Identity and Function of Unregulated Transcript Processing. <i>Frontiers in Endocrinology</i> , <b>2021</b> , 12, 625235	5.7	0
331	The Ca <sup>2+</sup> -binding protein sorcin stimulates transcriptional activity of the unfolded protein response mediator ATF6. <i>FEBS Letters</i> , <b>2021</b> , 595, 1782-1796	3.8	1
330	Dysregulation of the Pdx1/Ovol2/Zeb2 axis in dedifferentiated $\beta$ -cells triggers the induction of genes associated with epithelial-mesenchymal transition in diabetes. <i>Molecular Metabolism</i> , <b>2021</b> , 53, 101248	8.8	2
329	Replication and cross-validation of type 2 diabetes subtypes based on clinical variables: an IMI-RHAPSODY study. <i>Diabetologia</i> , <b>2021</b> , 64, 1982-1989	10.3	11
328	124-OR: Repetitive Ca <sup>2+</sup> Waves Emanate from a Stable Leader Cell in Mouse Islets. <i>Diabetes</i> , <b>2021</b> , 70, 124-OR	0.9	
327	87-LB: Binding Kinetics, Bias, Receptor Internalization, and Effects on Insulin Secretion for a Novel GLP1R-GIPR Dual Agonist, HISHS-2001. <i>Diabetes</i> , <b>2021</b> , 70, 87-LB	0.9	2
326	228-LB: $\beta$ arrestin-2 Deletion Influences GLP-1 Receptor Signaling in Pancreatic $\beta$ Cells In Vivo. <i>Diabetes</i> , <b>2021</b> , 70, 228-LB	0.9	
325	Adipocyte-specific deletion of Tcf7l2 induces dysregulated lipid metabolism and impairs glucose tolerance in mice. <i>Diabetologia</i> , <b>2021</b> , 64, 129-141	10.3	6
324	Genetic and biased agonist-mediated reductions in $\beta$ -arrestin recruitment prolong cAMP signaling at glucagon family receptors. <i>Journal of Biological Chemistry</i> , <b>2021</b> , 296, 100133	5.4	18
323	Pancreatic Sirtuin 3 Deficiency Promotes Hepatic Steatosis by Enhancing 5-Hydroxytryptamine Synthesis in Mice With Diet-Induced Obesity. <i>Diabetes</i> , <b>2021</b> , 70, 119-131	0.9	4
322	Sexually dimorphic roles for the type 2 diabetes-associated C2cd4b gene in murine glucose homeostasis. <i>Diabetologia</i> , <b>2021</b> , 64, 850-864	10.3	3
321	Chromatin 3D interaction analysis of the STARD10 locus unveils FCHSD2 as a regulator of insulin secretion. <i>Cell Reports</i> , <b>2021</b> , 34, 108703	10.6	1
320	Evaluation of efficacy- versus affinity-driven agonism with biased GLP-1R ligands P5 and exendin-F1. <i>Biochemical Pharmacology</i> , <b>2021</b> , 190, 114656	6	1

319	Distinct Molecular Signatures of Clinical Clusters in People With Type 2 Diabetes: An IMI-RHAPSODY Study. <i>Diabetes</i> , <b>2021</b> , 70, 2683-2693	0.9	4
318	Intravital imaging of islet Ca dynamics reveals enhanced $\beta$ cell connectivity after bariatric surgery in mice. <i>Nature Communications</i> , <b>2021</b> , 12, 5165	17.4	2
317	Mechanisms of weight loss after obesity surgery. <i>Endocrine Reviews</i> , <b>2021</b> ,	27.2	5
316	Macrophage monocarboxylate transporter 1 promotes peripheral nerve regeneration after injury in mice. <i>Journal of Clinical Investigation</i> , <b>2021</b> , 131,	15.9	1
315	PDX1 MAFA $\beta$ cells contribute to islet function and insulin release. <i>Nature Communications</i> , <b>2021</b> , 12, 674	17.4	15
314	Covid-19 and Diabetes: A Complex Bidirectional Relationship. <i>Frontiers in Endocrinology</i> , <b>2020</b> , 11, 5829367	3.7	36
313	Functional Genomics in Pancreatic $\beta$ Cells: Recent Advances in Gene Deletion and Genome Editing Technologies for Diabetes Research. <i>Frontiers in Endocrinology</i> , <b>2020</b> , 11, 576632	5.7	7
312	The type 2 diabetes gene product STARD10 is a phosphoinositide-binding protein that controls insulin secretory granule biogenesis. <i>Molecular Metabolism</i> , <b>2020</b> , 40, 101015	8.8	10
311	Synthesis and in vivo behaviour of an exendin-4-based MRI probe capable of $\beta$ cell-dependent contrast enhancement in the pancreas. <i>Dalton Transactions</i> , <b>2020</b> , 49, 4732-4740	4.3	4
310	Dietary substitution of SFA with MUFA within high-fat diets attenuates hyperinsulinaemia and pancreatic islet dysfunction. <i>British Journal of Nutrition</i> , <b>2020</b> , 124, 247-255	3.6	8
309	A polysaccharide extract from the medicinal plant Maidong inhibits the IKK-NF- $\kappa$ B pathway and IL-1 $\beta$ -induced islet inflammation and increases insulin secretion. <i>Journal of Biological Chemistry</i> , <b>2020</b> , 295, 12573-12587	5.4	4
308	Age matters: Grading granule secretion in beta cells. <i>Journal of Biological Chemistry</i> , <b>2020</b> , 295, 8912-89134	5.4	1
307	Glucocorticoid Metabolism in Obesity and Following Weight Loss. <i>Frontiers in Endocrinology</i> , <b>2020</b> , 11, 59	5.7	30
306	The pore-forming subunit MCU of the mitochondrial Ca uniporter is required for normal glucose-stimulated insulin secretion in vitro and in vivo in mice. <i>Diabetologia</i> , <b>2020</b> , 63, 1368-1381	10.3	16
305	Disconnect between signalling potency and in vivo efficacy of pharmacokinetically optimised biased glucagon-like peptide-1 receptor agonists. <i>Molecular Metabolism</i> , <b>2020</b> , 37, 100991	8.8	16
304	Signalling, trafficking and glucoregulatory properties of glucagon-like peptide-1 receptor agonists exendin-4 and lixisenatide. <i>British Journal of Pharmacology</i> , <b>2020</b> , 177, 3905-3923	8.6	20
303	Glucose in the hypothalamic paraventricular nucleus regulates GLP-1 release. <i>JCI Insight</i> , <b>2020</b> , 5,	9.9	2
302	1683-P: Upregulation of Pancreatic Islet EGF Receptor Improves Beta-Cell Identity and In Vivo Vascularisation in a Directly Observed Transplant Model. <i>Diabetes</i> , <b>2020</b> , 69, 1683-P	0.9	

301	1912-P: Bariatric Surgery Downregulates Glucocorticoid Signaling in Mice. <i>Diabetes</i> , <b>2020</b> , 69, 1912-P	0.9	
300	2100-P: Binding Kinetics, GLP-1 Receptor Internalization, and Effects on Insulin Secretion for GL0034 and Related GLP-1R Agonists. <i>Diabetes</i> , <b>2020</b> , 69, 2100-P	0.9	
299	320-OR: Bariatric Surgery Improves Ca <sup>2+</sup> Dynamics across Pancreatic Islets In Vivo. <i>Diabetes</i> , <b>2020</b> , 69, 320-OR	0.9	
298	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. <i>Diabetes</i> , <b>2020</b> , 69, 2072-P	0.9	
297	1798-P: Chronic Administration of a Long-Acting Glucagon Analogue Results in Enhanced Insulin Secretory Activity in a Directly-Observed Murine Model. <i>Diabetes</i> , <b>2020</b> , 69, 1798-P	0.9	
296	Effects on pancreatic Beta and other Islet cells of the glucose-dependent insulinotropic polypeptide. <i>Peptides</i> , <b>2020</b> , 125, 170201	3.8	8
295	Control by Ca of mitochondrial structure and function in pancreatic $\beta$ cells. <i>Cell Calcium</i> , <b>2020</b> , 91, 102282	4.4	6
294	Ligand-Specific Factors Influencing GLP-1 Receptor Post-Endocytic Trafficking and Degradation in Pancreatic Beta Cells. <i>International Journal of Molecular Sciences</i> , <b>2020</b> , 21,	6.3	13
293	Persistent or Transient Human $\beta$ Cell Dysfunction Induced by Metabolic Stress: Specific Signatures and Shared Gene Expression with Type 2 Diabetes. <i>Cell Reports</i> , <b>2020</b> , 33, 108466	10.6	22
292	The roles of cytosolic and intramitochondrial Ca and the mitochondrial Ca-uniporter (MCU) in the stimulation of mammalian oxidative phosphorylation. <i>Journal of Biological Chemistry</i> , <b>2020</b> , 295, 10506	5.4	2
291	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. <i>EBioMedicine</i> , <b>2020</b> , 58, 102895	8.8	6
290	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> , <b>2020</b> , 69, e10-e11	0.9	12
289	Loss of $\beta$ cell identity and diabetic phenotype in mice caused by disruption of CNOT3-dependent mRNA deadenylation. <i>Communications Biology</i> , <b>2020</b> , 3, 476	6.7	8
288	Metabolic and functional specialisations of the pancreatic beta cell: gene disallowance, mitochondrial metabolism and intercellular connectivity. <i>Diabetologia</i> , <b>2020</b> , 63, 1990-1998	10.3	27
287	Metabolic and Functional Heterogeneity in Pancreatic $\beta$ Cells. <i>Journal of Molecular Biology</i> , <b>2020</b> , 432, 1395-1406	6.5	13
286	The Influence of Peptide Context on Signaling and Trafficking of Glucagon-like Peptide-1 Receptor Biased Agonists. <i>ACS Pharmacology and Translational Science</i> , <b>2020</b> , 3, 345-360	5.9	20
285	Long Non-Coding RNAs as Key Modulators of Pancreatic $\beta$ Cell Mass and Function. <i>Frontiers in Endocrinology</i> , <b>2020</b> , 11, 610213	5.7	4
284	Agonist-induced membrane nanodomain clustering drives GLP-1 receptor responses in pancreatic beta cells. <i>PLoS Biology</i> , <b>2019</b> , 17, e3000097	9.7	34

283	An essential role for the Zn transporter ZIP7 in B cell development. <i>Nature Immunology</i> , <b>2019</b> , 20, 350-361	19.1	54
282	Leader $\beta$ -cells coordinate Ca dynamics across pancreatic islets in vivo. <i>Nature Metabolism</i> , <b>2019</b> , 1, 615-624	14.6	70
281	Contributions of Mitochondrial Dysfunction to $\beta$ Cell Failure in Diabetes Mellitus <b>2019</b> , 217-243		2
280	Convolutional neural networks for reconstruction of undersampled optical projection tomography data applied to in vivo imaging of zebrafish. <i>Journal of Biophotonics</i> , <b>2019</b> , 12, e201900128	3.1	6
279	Fostering improved human islet research: a European perspective. <i>Diabetologia</i> , <b>2019</b> , 62, 1514-1516	10.3	9
278	Pancreatic islet secretion: gabbling via GABA. <i>Nature Metabolism</i> , <b>2019</b> , 1, 1032-1033	14.6	
277	Loss of ZnT8 function protects against diabetes by enhanced insulin secretion. <i>Nature Genetics</i> , <b>2019</b> , 51, 1596-1606	36.3	45
276	mTORC1 to AMPK switching underlies $\beta$ cell metabolic plasticity during maturation and diabetes. <i>Journal of Clinical Investigation</i> , <b>2019</b> , 129, 4124-4137	15.9	47
275	2183-P: miR-125b Is Regulated by Glucose via AMPK and Impairs $\beta$ Cell Function. <i>Diabetes</i> , <b>2019</b> , 68, 2183-2189	10.9	2
274	161-LB: Inhibition of Kidney SGLT2 Expression following Bariatric Surgery in Mice. <i>Diabetes</i> , <b>2019</b> , 68, 161-LB	0.9	
273	Zn-transporters ZIP7 and ZnT7 play important role in progression of cardiac dysfunction via affecting sarco(endo)plasmic reticulum-mitochondria coupling in hyperglycemic cardiomyocytes. <i>Mitochondrion</i> , <b>2019</b> , 44, 41-52	4.9	28
272	Targeting GLP-1 receptor trafficking to improve agonist efficacy. <i>Nature Communications</i> , <b>2018</b> , 9, 1602	17.4	88
271	Sensors for measuring subcellular zinc pools. <i>Metallomics</i> , <b>2018</b> , 10, 229-239	4.5	25
270	Control of insulin secretion by GLP-1. <i>Peptides</i> , <b>2018</b> , 100, 75-84	3.8	42
269	MiR-184 expression is regulated by AMPK in pancreatic islets. <i>FASEB Journal</i> , <b>2018</b> , 32, 2587-2600	0.9	28
268	A Targeted RNAi Screen Identifies Endocytic Trafficking Factors That Control GLP-1 Receptor Signaling in Pancreatic $\beta$ -Cells. <i>Diabetes</i> , <b>2018</b> , 67, 385-399	0.9	26
267	Adrenaline Stimulates Glucagon Secretion by Tpc2-Dependent Ca Mobilization From Acidic Stores in Pancreatic $\beta$ Cells. <i>Diabetes</i> , <b>2018</b> , 67, 1128-1139	0.9	46
266	Mice harboring the human R138X loss-of-function mutation have increased insulin secretory capacity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, E7642-E7649	11.5	26

265	Down-regulation of vascular GLP-1 receptor expression in human subjects with obesity. <i>Scientific Reports</i> , <b>2018</b> , 8, 10644	4.9	12
264	The effects of kisspeptin on $\beta$ -cell function, serum metabolites and appetite in humans. <i>Diabetes, Obesity and Metabolism</i> , <b>2018</b> , 20, 2800-2810	6.7	39
263	Hypothalamic arcuate nucleus glucokinase regulates insulin secretion and glucose homeostasis. <i>Diabetes, Obesity and Metabolism</i> , <b>2018</b> , 20, 2246-2254	6.7	6
262	Chronic d-serine supplementation impairs insulin secretion. <i>Molecular Metabolism</i> , <b>2018</b> , 16, 191-202	8.8	11
261	Obesity, diabetes and zinc: A workshop promoting knowledge and collaboration between the UK and Israel, november 28-30, 2016 - Israel. <i>Journal of Trace Elements in Medicine and Biology</i> , <b>2018</b> , 49, 79-85	4.1	0
260	Neuronatin regulates pancreatic $\beta$ -cell insulin content and secretion. <i>Journal of Clinical Investigation</i> , <b>2018</b> , 128, 3369-3381	15.9	26
259	Real-Time In Vivo Imaging of Whole Islet Ca <sup>2+</sup> Dynamics Reveals Glucose-Induced Changes in Beta-Cell Connectivity in Mouse and Human Islets. <i>Diabetes</i> , <b>2018</b> , 67, 249-LB	0.9	0
258	Manipulation and Measurement of AMPK Activity in Pancreatic Islets. <i>Methods in Molecular Biology</i> , <b>2018</b> , 1732, 413-431	1.4	3
257	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. <i>Diabetologia</i> , <b>2018</b> , 61, 641-657	10.3	84
256	Glucocorticoids Reprogram $\beta$ -Cell Signaling to Preserve Insulin Secretion. <i>Diabetes</i> , <b>2018</b> , 67, 278-290	0.9	39
255	The Impact of Pancreatic Beta Cell Heterogeneity on Type 1 Diabetes Pathogenesis. <i>Current Diabetes Reports</i> , <b>2018</b> , 18, 112	5.6	9
254	The $\beta$ -cell in diabetes mellitus. <i>Nature Reviews Endocrinology</i> , <b>2018</b> , 14, 694-704	15.2	49
253	Age-related islet inflammation marks the proliferative decline of pancreatic beta-cells in zebrafish. <i>ELife</i> , <b>2018</b> , 7,	8.9	19
252	Transcription factor-7-like 2 ( <i>Tf7l2</i> ) gene acts downstream of the <i>Ins1</i> kinase to control mTOR signaling, $\beta$ -cell growth, and insulin secretion. <i>Journal of Biological Chemistry</i> , <b>2018</b> , 293, 14178-14189	5.4	15
251	The Role of Oxidative Stress and Hypoxia in Pancreatic Beta-Cell Dysfunction in Diabetes Mellitus. <i>Antioxidants and Redox Signaling</i> , <b>2017</b> , 26, 501-518	8.4	273
250	Diabetes: Controlling the identity of the adult pancreatic $\beta$ -cell. <i>Nature Reviews Endocrinology</i> , <b>2017</b> , 13, 129-130	15.2	4
249	Decreased STARD10 Expression Is Associated with Defective Insulin Secretion in Humans and Mice. <i>American Journal of Human Genetics</i> , <b>2017</b> , 100, 238-256	11	50
248	Hyperglycemia-Induced Changes in ZIP7 and ZnT7 Expression Cause Zn Release From the Sarco(endo)plasmic Reticulum and Mediate ER Stress in the Heart. <i>Diabetes</i> , <b>2017</b> , 66, 1346-1358	0.9	46

247	GABA signaling: A route to new pancreatic $\beta$ cells. <i>Cell Research</i> , <b>2017</b> , 27, 309-310	24.7	6
246	The transcription factor is required for pancreatic $\beta$ cell identity, glucose-regulated ATP synthesis, and Ca dynamics in adult mice. <i>Journal of Biological Chemistry</i> , <b>2017</b> , 292, 8892-8906	5.4	34
245	Local and regional control of calcium dynamics in the pancreatic islet. <i>Diabetes, Obesity and Metabolism</i> , <b>2017</b> , 19 Suppl 1, 30-41	6.7	29
244	SLC30A9 mutation affecting intracellular zinc homeostasis causes a novel cerebro-renal syndrome. <i>Brain</i> , <b>2017</b> , 140, 928-939	11.2	43
243	Molecular phenotyping of multiple mouse strains under metabolic challenge uncovers a role for in glucose-induced insulin secretion. <i>Molecular Metabolism</i> , <b>2017</b> , 6, 340-351	8.8	30
242	Pancreatic alpha cell-selective deletion of Tcf7l2 impairs glucagon secretion and counter-regulatory responses to hypoglycaemia in mice. <i>Diabetologia</i> , <b>2017</b> , 60, 1043-1050	10.3	13
241	Remote control of glucose homeostasis in vivo using photopharmacology. <i>Scientific Reports</i> , <b>2017</b> , 7, 291	4.9	23
240	Analysis of Purified Pancreatic Islet Beta and Alpha Cell Transcriptomes Reveals 11 $\beta$ -Hydroxysteroid Dehydrogenase (Hsd11b1) as a Novel Disallowed Gene. <i>Frontiers in Genetics</i> , <b>2017</b> , 8, 41	4.5	36
239	Beta Cell Hubs Dictate Pancreatic Islet Responses to $\beta$ -Glucose. <i>Cell Metabolism</i> , <b>2016</b> , 24, 389-401	24.6	248
238	Lipid-tuned Zinc Transport Activity of Human ZnT8 Protein Correlates with Risk for Type-2 Diabetes. <i>Journal of Biological Chemistry</i> , <b>2016</b> , 291, 26950-26957	5.4	50
237	Proglucagon-Derived Peptides Do Not Significantly Affect Acute Exocrine Pancreas in Rats. <i>Pancreas</i> , <b>2016</b> , 45, 967-73	2.6	
236	Photoswitchable diacylglycerols enable optical control of protein kinase C. <i>Nature Chemical Biology</i> , <b>2016</b> , 12, 755-62	11.7	83
235	Molecular Genetic Regulation of Slc30a8/ZnT8 Reveals a Positive Association With Glucose Tolerance. <i>Molecular Endocrinology</i> , <b>2016</b> , 30, 77-91		51
234	Allosteric Optical Control of a Class B G-Protein-Coupled Receptor. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 5865-8	16.4	36
233	Cell type-specific deletion in mice reveals roles for PAS kinase in insulin and glucagon production. <i>Diabetologia</i> , <b>2016</b> , 59, 1938-47	10.3	7
232	Calcium-insensitive splice variants of mammalian E1 subunit of 2-oxoglutarate dehydrogenase complex with tissue-specific patterns of expression. <i>Biochemical Journal</i> , <b>2016</b> , 473, 1165-78	3.8	22
231	Zinc and diabetes. <i>Archives of Biochemistry and Biophysics</i> , <b>2016</b> , 611, 79-85	4.1	96
230	Pancreatic $\beta$ cell imaging in humans: fiction or option?. <i>Diabetes, Obesity and Metabolism</i> , <b>2016</b> , 18, 6-15	6.7	31

229	Disallowance of Acot7 in $\beta$ -Cells Is Required for Normal Glucose Tolerance and Insulin Secretion. <i>Diabetes</i> , <b>2016</b> , 65, 1268-82	0.9	19
228	Sorcini Links Pancreatic $\beta$ -Cell Lipotoxicity to ER Ca <sup>2+</sup> Stores. <i>Diabetes</i> , <b>2016</b> , 65, 1009-21	0.9	32
227	Role of microRNAs in the age-associated decline of pancreatic beta cell function in rat islets. <i>Diabetologia</i> , <b>2016</b> , 59, 161-169	10.3	31
226	MiRNAs in $\beta$ -Cell Development, Identity, and Disease. <i>Frontiers in Genetics</i> , <b>2016</b> , 7, 226	4.5	36
225	Proglucagon Promoter Cre-Mediated AMPK Deletion in Mice Increases Circulating GLP-1 Levels and Oral Glucose Tolerance. <i>PLoS ONE</i> , <b>2016</b> , 11, e0149549	3.7	9
224	Over-expression of Slc30a8/ZnT8 selectively in the mouse $\beta$ cell impairs glucagon release and responses to hypoglycemia. <i>Nutrition and Metabolism</i> , <b>2016</b> , 13, 46	4.6	16
223	Allosterische optische Steuerung eines Klasse-B-G-Protein-gekoppelten Rezeptors. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 5961-5965	3.6	8
222	Changes in the expression of the type 2 diabetes-associated gene VPS13C in the $\beta$ -cell are associated with glucose intolerance in humans and mice. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , <b>2016</b> , 311, E488-507	6	14
221	Intracellular zinc in insulin secretion and action: a determinant of diabetes risk?. <i>Proceedings of the Nutrition Society</i> , <b>2016</b> , 75, 61-72	2.9	44
220	The two pore channel TPC2 is dispensable in pancreatic $\beta$ cells for normal Ca <sup>2+</sup> dynamics and insulin secretion. <i>Cell Calcium</i> , <b>2016</b> , 59, 32-40	4	20
219	Chronic Activation of $\alpha$ AMPK Induces Obesity and Reduces $\beta$ Cell Function. <i>Cell Metabolism</i> , <b>2016</b> , 23, 821-36	24.6	66
218	Modeling Type 2 Diabetes GWAS Candidate Gene Function in hESCs. <i>Cell Stem Cell</i> , <b>2016</b> , 19, 281-2	18	4
217	Pancreatic $\beta$ -cell identity, glucose sensing and the control of insulin secretion. <i>Biochemical Journal</i> , <b>2015</b> , 466, 203-18	3.8	233
216	eZinCh-2: A Versatile, Genetically Encoded FRET Sensor for Cytosolic and Intraorganelle Zn(2+) Imaging. <i>ACS Chemical Biology</i> , <b>2015</b> , 10, 2126-34	4.9	64
215	Metformin activates a duodenal Ampk-dependent pathway to lower hepatic glucose production in rats. <i>Nature Medicine</i> , <b>2015</b> , 21, 506-11	50.5	242
214	Limited impact on glucose homeostasis of leptin receptor deletion from insulin- or proglucagon-expressing cells. <i>Molecular Metabolism</i> , <b>2015</b> , 4, 619-30	8.8	31
213	The zinc transporter ZIP12 regulates the pulmonary vascular response to chronic hypoxia. <i>Nature</i> , <b>2015</b> , 524, 356-60	50.4	85
212	Changes in microRNA expression during differentiation of embryonic and induced pluripotent stem cells to definitive endoderm. <i>Gene Expression Patterns</i> , <b>2015</b> , 19, 70-82	1.5	4



211	Nicotinic Acid Adenine Dinucleotide Phosphate (NAADP) and Endolysosomal Two-pore Channels Modulate Membrane Excitability and Stimulus-Secretion Coupling in Mouse Pancreatic $\beta$ Cells. <i>Journal of Biological Chemistry</i> , <b>2015</b> , 290, 21376-92	5.4	43
210	Beta cell connectivity in pancreatic islets: a type 2 diabetes target?. <i>Cellular and Molecular Life Sciences</i> , <b>2015</b> , 72, 453-467	10.3	46
209	Selective disruption of Tcf7l2 in the pancreatic $\beta$ cell impairs secretory function and lowers $\beta$ cell mass. <i>Human Molecular Genetics</i> , <b>2015</b> , 24, 1390-9	5.6	68
208	Sarco(endo)plasmic reticulum ATPase is a molecular partner of Wolfram syndrome 1 protein, which negatively regulates its expression. <i>Human Molecular Genetics</i> , <b>2015</b> , 24, 814-27	5.6	32
207	SLC30A8 mutations in type 2 diabetes. <i>Diabetologia</i> , <b>2015</b> , 58, 31-6	10.3	73
206	Dual-modal magnetic resonance/fluorescent zinc probes for pancreatic $\beta$ -cell mass imaging. <i>Chemistry - A European Journal</i> , <b>2015</b> , 21, 5023-33	4.8	47
205	Defects in mitophagy promote redox-driven metabolic syndrome in the absence of TP53INP1. <i>EMBO Molecular Medicine</i> , <b>2015</b> , 7, 802-18	12	30
204	LKB1 and AMPK $\beta$ are required in pancreatic alpha cells for the normal regulation of glucagon secretion and responses to hypoglycemia. <i>Molecular Metabolism</i> , <b>2015</b> , 4, 277-86	8.8	21
203	DICER Inactivation Identifies Pancreatic $\beta$ -Cell "Disallowed" Genes Targeted by MicroRNAs. <i>Molecular Endocrinology</i> , <b>2015</b> , 29, 1067-79		53
202	Optical Control of Insulin Secretion Using an Incretin Switch. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 15565-9	16.4	60
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13	Mature and immature $\beta$ -cells both contribute to islet function and insulin release	2
12	Chromatin 3D interaction analysis of the STARD10 locus unveils FCHSD2 as a new regulator of insulin secretion	2
11	Mitofusins Mfn1 and Mfn2 are required to preserve glucose-but not incretin- stimulated beta cell connectivity and insulin secretion	3
10	Sorcin stimulates Activation Transcription Factor 6(ATF6) transcriptional activity	1
9	Intravital imaging of islet Ca <sup>2+</sup> dynamics reveals enhanced $\beta$ cell connectivity after bariatric surgery in mice	2
8	Sexually dimorphic roles for the type 2 diabetes-associated C2cd4b gene in murine glucose homeostasis	2
7	Reduced expression of TCF7L2 in adipocyte impairs glucose tolerance associated with decreased insulin secretion, incretins levels and lipid metabolism dysregulation in male mice	1
6	The long non-coding RNA Pax6os1/PAX6-AS1 modulates pancreatic $\beta$ -cell identity and function	5
5	Replication and cross-validation of T2D subtypes based on clinical variables: an IMI-RHAPSODY study	1
4	Loss of ZnT8 function protects against diabetes by enhanced insulin secretion	3
3	Vertical sleeve gastrectomy lowers kidney SGLT2 expression in the mouse	2
2	Differences in signalling, trafficking and glucoregulatory properties of glucagon-like peptide-1 receptor agonists exendin-4 and lixisenatide	2
1	Glucose-dependent miR-125b is a negative regulator of $\beta$ -cell function	1