Hindrik Mulder

List of Publications by Year
in descending order

129 papers	10,415 citations	31902 53 h-index	35952 97 g-index
134 all docs	134 docs citations	134 times ranked	12441 citing authors

#	Article	IF	Citations
1	Novel subgroups of adult-onset diabetes and their association with outcomes: a data-driven cluster analysis of six variables. Lancet Diabetes and Endocrinology,the, 2018, 6, 361-369.	5.5	1,430
2	Isolation of INS-1-derived cell lines with robust ATP-sensitive K+ channel-dependent and -independent glucose-stimulated insulin secretion. Diabetes, 2000, 49, 424-430.	0.3	813
3	Common variant in MTNR1B associated with increased risk of type 2 diabetes and impaired early insulin secretion. Nature Genetics, 2009, 41, 82-88.	9.4	642
4	The ghrelin cell: a novel developmentally regulated islet cell in the human pancreas. Regulatory Peptides, 2002, 107, 63-69.	1.9	353
5	13C NMR isotopomer analysis reveals a connection between pyruvate cycling and glucose-stimulated insulin secretion (GSIS). Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 2708-2713.	3.3	247
6	Orexin loss in Huntington's disease. Human Molecular Genetics, 2005, 14, 39-47.	1.4	246
7	Sulforaphane reduces hepatic glucose production and improves glucose control in patients with type 2 diabetes. Science Translational Medicine, 2017, 9, .	5.8	240
8	Increased Melatonin Signaling Is a Risk Factor for Type 2 Diabetes. Cell Metabolism, 2016, 23, 1067-1077.	7.2	194
9	Ghrelin Is Expressed in a Novel Endocrine Cell Type in Developing Rat Islets and Inhibits Insulin Secretion from INS-1 (832/13) Cells. Journal of Histochemistry and Cytochemistry, 2004, 52, 301-310.	1.3	188
10	Increased Insulin Secretion and Glucose Tolerance in Mice Lacking Islet Amyloid Polypeptide (Amylin). Biochemical and Biophysical Research Communications, 1998, 250, 271-277.	1.0	149
11	Pituitary adenylate cyclase activating polypeptide expression in sensory neurons. Neuroscience, 1994, 63, 307-312.	1.1	138
12	Fracture Mechanics of Collagen Fibrils: Influence of Natural Cross-Links. Biophysical Journal, 2013, 104, 2476-2484.	0.2	136
13	Melatonin receptors in pancreatic islets: good morning to a novel type 2 diabetes gene. Diabetologia, 2009, 52, 1240-1249.	2.9	132
14	The R6/2 transgenic mouse model of Huntington's disease develops diabetes due to deficient Î²-cell mass and exocytosis. Human Molecular Genetics, 2005, 14, 565-574.	1.4	129
15	Progressive alterations in the hypothalamic-pituitary-adrenal axis in the R6/2 transgenic mouse model of Huntington's disease. Human Molecular Genetics, 2006, 15, 1713-1721.	1.4	122
16	Regulated Exocytosis of GABA-containing Synaptic-like Microvesicles in Pancreatic Î²-cells. Journal of General Physiology, 2004, 123, 191-204.	0.9	118
17	Dissociated insulinotropic sensitivity to glucose and carbachol in high-fat dietâ€"induced insulin resistance in C57BL/6J mice. Metabolism: Clinical and Experimental, 1997, 46, 97-106.	1.5	117
18	Mitochondrial dysfunction in pancreatic Î²-cells in Type 2 Diabetes. Molecular and Cellular Endocrinology, 2009, 297, 34-40.	1.6	115

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19	Increased metabolism in the R6/2 mouse model of Huntingtonâ€™s disease. Neurobiology of Disease, 2008, 29, 41-51.	2.1	114
20	Frataxin deficiency in pancreatic islets causes diabetes due to loss of Î² cell mass. Journal of Clinical Investigation, 2003, 112, 527-534.	3.9	112
21	Hormone-sensitive Lipase Null Mice Exhibit Signs of Impaired Insulin Sensitivity whereas Insulin Secretion Is Intact. Journal of Biological Chemistry, 2003, 278, 36380-36388.	1.6	108
22	Biochemical Mechanism of Lipid-induced Impairment of Glucose-stimulated Insulin Secretion and Reversal with a Malate Analogue. Journal of Biological Chemistry, 2004, 279, 27263-27271.	1.6	106
23	Calcitonin gene-related peptide and nitric oxide in the trigeminal ganglion: Cerebral vasodilatation from trigeminal nerve stimulation involves mainly calcitonin gene-related peptide. Journal of the Autonomic Nervous System, 1998, 70, 15-22.	1.9	104
24	Hormone-sensitive lipase, the rate-limiting enzyme in triglyceride hydrolysis, is expressed and active in beta-cells. Diabetes, 1999, 48, 228-232.	0.3	102
25	Tight Coupling between Glucose and Mitochondrial Metabolism in Clonal Î²-Cells Is Required for Robust Insulin Secretion. Journal of Biological Chemistry, 2009, 284, 32395-32404.	1.6	97
26	Cocaine- and Amphetamine-regulated Transcript (CART) Is Expressed in Several Islet Cell Types During Rat Development. Journal of Histochemistry and Cytochemistry, 2004, 52, 169-177.	1.3	93
27	Molecular Cloning, Genomic Organization, and Expression of a Testicular Isoform of Hormone-Sensitive Lipase. Genomics, 1996, 35, 441-447.	1.3	87
28	Pituitary adenylate cyclase activating polypeptide (PACAP) in the gastrointestinal tract of the rat: distribution and effects of capsaicin or denervation. Cell and Tissue Research, 1997, 291, 65-79.	1.5	85
29	Regulation of core clock genes in human islets. Metabolism: Clinical and Experimental, 2012, 61, 978-985.	1.5	84
30	Overexpression of a Modified Human Malonyl-CoA Decarboxylase Blocks the Glucose-induced Increase in Malonyl-CoA Level but Has No Impact on Insulin Secretion in INS-1-derived (832/13) Î²-Cells. Journal of Biological Chemistry, 2001, 276, 6479-6484.	1.6	83
31	The pathogenetic role of Î²-cell mitochondria in type 2 diabetes. Journal of Endocrinology, 2018, 236, R145-R159.	1.2	83
32	Time-resolved metabolomics analysis of Î²-cells implicates the pentose phosphate pathway in the control of insulin release. Biochemical Journal, 2013, 450, 595-605.	1.7	82
33	A Common Variant in TFB1M Is Associated with Reduced Insulin Secretion and Increased Future Risk of Type 2 Diabetes. Cell Metabolism, 2011, 13, 80-91.	7.2	81
34	Islet amyloid polypeptide gene expression in the endocrine pancreas of the rat: a combined in situ hybridization and immunocytochemical study. Cell and Tissue Research, 1993, 274, 467-474.	1.5	78
35	Pituitary adenylate cyclase-activating peptide is upregulated in sensory neurons by inflammation. NeuroReport, 1998, 9, 2833-2836.	0.6	75
36	HDAC7 is overexpressed in human diabetic islets and impairs insulin secretion in rat islets and clonal beta cells. Diabetologia, 2017, 60, 116-125.	2.9	75

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37	The effects of high glucose exposure on global gene expression and DNA methylation in human pancreatic islets. Molecular and Cellular Endocrinology, 2018, 472, 57-67.	1.6	72
38	Diabetes in Friedreich Ataxia. Journal of Neurochemistry, 2013, 126, 94-102.	2.1	67
39	Gastric Bypass Improves Î²-Cell Function and Increases Î²-Cell Mass in a Porcine Model. Diabetes, 2014, 63, 1665-1671.	0.3	67
40	Development and optimization of a metabolomic method for analysis of adherent cell cultures. Analytical Biochemistry, 2010, 404, 30-39.	1.1	66
41	Coordinate Changes in Histone Modifications, mRNA Levels, and Metabolite Profiles in Clonal INS-1 832/13 Î²-Cells Accompany Functional Adaptations to Lipotoxicity. Journal of Biological Chemistry, 2013, 288, 11973-11987.	1.6	66
42	Inhibition of Lipase Activity and Lipolysis in Rat Islets Reduces Insulin Secretion. Diabetes, 2004, 53, 122-128.	0.3	65
43	Elevated miR-130a/miR130b/miR-152 expression reduces intracellular ATP levels in the pancreatic beta cell. Scientific Reports, 2017, 7, 44986.	1.6	64
44	CART Regulates Islet Hormone Secretion and Is Expressed in the Â-Cells of Type 2 Diabetic Rats. Diabetes, 2006, 55, 305-311.	0.3	63
45	NOS-containing neurons in the rat gut and coeliac ganglia. Neuropharmacology, 1994, 33, 1323-1331.	2.0	62
46	Islet amyloid polypeptide in the islets of Langerhans: friend or foe?. Diabetologia, 2000, 43, 687-695.	2.9	62
47	Reduction of GnRH and infertility in the R6/2 mouse model of Huntington's disease. European Journal of Neuroscience, 2005, 22, 1541-1546.	1.2	61
48	Enhanced mitochondrial metabolism may account for the adaptation to insulin resistance in islets from C57BL/6J mice fed a high-fat diet. Diabetologia, 2006, 50, 74-83.	2.9	61
49	Anaplerosis via pyruvate carboxylase is required for the fuel-induced rise in the ATP:ADP ratio in rat pancreatic islets. Diabetologia, 2006, 49, 1578-1586.	2.9	58
50	Genotype-based treatment of type 2 diabetes with an Î± _{2A} -adrenergic receptor antagonist. Science Translational Medicine, 2014, 6, 257ra139.	5.8	58
51	Effect of murine strain on metabolic pathways of glucose production after brief or prolonged fasting. American Journal of Physiology - Endocrinology and Metabolism, 2005, 289, E53-E61.	1.8	57
52	Fumarate Hydratase Deletion in Pancreatic Î² Cells Leads to Progressive Diabetes. Cell Reports, 2017, 20, 3135-3148.	2.9	57
53	Dysregulation of Glucagon Secretion by Hyperglycemia-Induced Sodium-Dependent Reduction of ATP Production. Cell Metabolism, 2019, 29, 430-442.e4.	7.2	57
54	Transcribing Î²-cell mitochondria in health and disease. Molecular Metabolism, 2017, 6, 1040-1051.	3.0	56

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55	Islet amyloid polypeptide is expressed in endocrine cells of the gastric mucosa in the rat and mouse. Gastroenterology, 1994, 107, 712-719.	0.6	54
56	Reduced nociceptive behavior in islet amyloid polypeptide (amylin) knockout mice. Molecular Brain Research, 1998, 63, 180-183.	2.5	54
57	Characterization of Stimulus-Secretion Coupling in the Human Pancreatic EndoC-Î²H1 Beta Cell Line. PLoS ONE, 2015, 10, e0120879.	1.1	54
58	Islet Amyloid Polypeptide in the Gut and Pancreas. Peptides, 1997, 18, 771-783.	1.2	53
59	Î²-Cell-targeted Overexpression of Phosphodiesterase 3B in Mice Causes Impaired Insulin Secretion, Glucose Intolerance, and Deranged Islet Morphology. Journal of Biological Chemistry, 2004, 279, 15214-15222.	1.6	51
60	Loss of TFB1M results in mitochondrial dysfunction that leads to impaired insulin secretion and diabetes. Human Molecular Genetics, 2014, 23, 5733-5749.	1.4	51
61	Protein Kinase B Is Expressed in Pancreatic Î² Cells and Activated upon Stimulation with Insulin-like Growth Factor I. Biochemical and Biophysical Research Communications, 1998, 250, 181-186.	1.0	49
62	Distribution of melatonin receptors in murine pancreatic islets. Journal of Pineal Research, 2011, 50, 412-417.	3.4	49
63	Adrenomedullin: localization in the gastrointestinal tract and effects on insulin secretion. Regulatory Peptides, 1996, 62, 107-112.	1.9	47
64	Metabolomic and Proteomic Analysis of a Clonal Insulin-Producing Î²-Cell Line (INS-1 832/13). Journal of Proteome Research, 2008, 7, 400-411.	1.8	46
65	A beta cell-specific knockout of hormone-sensitive lipase in mice results in hyperglycaemia and disruption of exocytosis. Diabetologia, 2009, 52, 271-280.	2.9	45
66	TIGER: The gene expression regulatory variation landscape of human pancreatic islets. Cell Reports, 2021, 37, 109807.	2.9	45
67	Pituitary adenylate cyclase activating polypeptide is expressed in autonomic neurons. Regulatory Peptides, 1995, 59, 121-128.	1.9	44
68	Mutant huntingtin interacts with Â-tubulin and disrupts vesicular transport and insulin secretion. Human Molecular Genetics, 2009, 18, 3942-3954.	1.4	43
69	Islet Perturbations in Rats Fed a High-Fat Diet. Pancreas, 1999, 18, 75-83.	0.5	42
70	Metabolomic analysis of a human oral glucose tolerance test reveals fatty acids as reliable indicators of regulated metabolism. Metabolomics, 2010, 6, 56-66.	1.4	42
71	Metabolomic analyses reveal profound differences in glycolytic and tricarboxylic acid cycle metabolism in glucose-responsive and -unresponsive clonal Î²-cell lines. Biochemical Journal, 2011, 435, 277-284.	1.7	41
72	Cartilage oligomeric matrix protein promotes prostate cancer progression by enhancing invasion and disrupting intracellular calcium homeostasis. Oncotarget, 2017, 8, 98298-98311.	0.8	40

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73	Procolipase is produced in the rat stomach â€" a novel source of enterostatin. Lipids and Lipid Metabolism, 1996, 1301, 207-212.	2.6	39
74	CaV1.2 rather than CaV1.3 is coupled to glucose-stimulated insulin secretion in INS-1 832/13 cells. Journal of Molecular Endocrinology, 2008, 41, 1-11.	1.1	39
75	Metabolite Profiling Reveals Normal Metabolic Control in Carriers of Mutations in the Glucokinase Gene (MODY2). Diabetes, 2013, 62, 653-661.	0.3	39
76	Metabolite profile deviations in an oral glucose tolerance test-a comparison between lean and obese individuals. Obesity, 2014, 22, 2388-2395.	1.5	37
77	Mitochondrial transcription factor B2 is essential for mitochondrial and cellular function in pancreatic Î²-cells. Molecular Metabolism, 2017, 6, 651-663.	3.0	37
78	Plasma Membrane Potential Oscillations in Insulin Secreting Ins-1 832/13 Cells Do Not Require Glycolysis and Are Not Initiated by Fluctuations in Mitochondrial Bioenergetics. Journal of Biological Chemistry, 2012, 287, 15706-15717.	1.6	35
79	Chronic High Glucose and Pyruvate Levels Differentially Affect Mitochondrial Bioenergetics and Fuel-stimulated Insulin Secretion from Clonal INS-1 832/13 Cells. Journal of Biological Chemistry, 2014, 289, 3786-3798.	1.6	35
80	NNT reverse mode of operation mediates glucose control of mitochondrial NADPH and glutathione redox state in mouse pancreatic Î²-cells. Molecular Metabolism, 2017, 6, 535-547.	3.0	35
81	Vasoactive intestinal peptide expression in enteric neurons is upregulated by both colchicine and axotomy.. Regulatory Peptides, 1996, 63, 113-121.	1.9	35
82	Differential expression of islet amyloid polypeptide (amylin) and insulin in experimental diabetes in rodents. Molecular and Cellular Endocrinology, 1995, 114, 101-109.	1.6	34
83	Effects of Ingestion Routes on Hormonal and Metabolic Profiles in Gastric-Bypassed Humans. Journal of Clinical Endocrinology and Metabolism, 2013, 98, E856-E861.	1.8	34
84	Localization of hormone-sensitive lipase to rat Sertoli cells and its expression in developing and degenerating testes. FEBS Letters, 1994, 355, 125-130.	1.3	33
85	Glucagon-Like Peptide 1 Stimulates Insulin Secretion via Inhibiting RhoA/ROCK Signaling and Disassembling Glucotoxicity-Induced Stress Fibers. Endocrinology, 2014, 155, 4676-4685.	1.4	33
86	Use of RNA Interference to Investigate Cytokine Signal Transduction in Pancreatic Beta Cells. Methods in Molecular Biology, 2012, 820, 179-194.	0.4	33
87	Islet amyloid polypeptide and calcitonin gene-related peptide expression are upregulated in lumbar dorsal root ganglia after unilateral adjuvant-induced inflammation in the rat paw. Molecular Brain Research, 1997, 50, 127-135.	2.5	31
88	Hormone-Sensitive Lipase Deficiency in Mouse Islets Abolishes Neutral Cholesterol Ester Hydrolase Activity but Leaves Lipolysis, Acylglycerides, Fat Oxidation, and Insulin Secretion Intact. Endocrinology, 2004, 145, 3746-3753.	1.4	31
89	Cerebrospinal fluid levels of orexin-A are not a clinically useful biomarker for Huntington disease. Clinical Genetics, 2006, 70, 78-79.	1.0	31
90	Islet amyloid polypeptide (amylin)-deficient mice develop a more severe form of alloxan-induced diabetes. American Journal of Physiology - Endocrinology and Metabolism, 2000, 278, E684-E691.	1.8	30

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91	Effects of Growth Hormone on the Function of Î²â€Adrenoceptor Subtypes in Rat Adipocytes. Obesity, 2004, 12, 330-339.	4.0	30
92	Pituitary adenylate cyclase-activating polypeptide and islet amyloid polypeptide in primary sensory neurons. Molecular Neurobiology, 1999, 19, 229-253.	1.9	29
93	Rat insulin promoter 2-Cre recombinase mice bred onto a pure C57BL/6J background exhibit unaltered glucose tolerance. Journal of Endocrinology, 2007, 194, 551-555.	1.2	28
94	Melatonin signalling and type 2 diabetes risk: too little, too much or just right?. Diabetologia, 2017, 60, 826-829.	2.9	28
95	Inhibition of the malateâ€"aspartate shuttle in mouse pancreatic islets abolishes glucagon secretion without affecting insulin secretion. Biochemical Journal, 2015, 468, 49-63.	1.7	27
96	Season-dependent associations of circadian rhythm-regulating loci (CRY1, CRY2 and MTNR1B) and glucose homeostasis: the GLACIER Study. Diabetologia, 2015, 58, 997-1005.	2.9	26
97	Pyruvate dehydrogenase kinase 1 controls mitochondrial metabolism and insulin secretion in INS-1 832/13 clonal Î²-cells. Biochemical Journal, 2010, 429, 205-213.	1.7	25
98	Precise expression of Fis1 is important for glucose responsiveness of beta cells. Journal of Endocrinology, 2016, 230, 81-91.	1.2	25
99	Bioenergetic Impairment in Congenital Muscular Dystrophy Type 1A and Leigh Syndrome Muscle Cells. Scientific Reports, 2017, 7, 45272.	1.6	25
100	Amino Acid Signatures to Evaluate the Beneficial Effects of Weight Loss. International Journal of Endocrinology, 2017, 2017, 1-12.	0.6	25
101	Islet Î²-cell area and hormone expression are unaltered in Huntingtonâ€™s disease. Histochemistry and Cell Biology, 2008, 129, 623-629.	0.8	24
102	Expression of non-classical islet hormone-like peptides during the embryonic development of the pancreas. Microscopy Research and Technique, 1998, 43, 313-321.	1.2	23
103	Development of a gas chromatography/mass spectrometry based metabolomics protocol by means of statistical experimental design. Metabolomics, 2012, 8, 50-63.	1.4	23
104	Unique and Shared Metabolic Regulation in Clonal Î²-Cells and Primary Islets Derived From Rat Revealed by Metabolomics Analysis. Endocrinology, 2015, 156, 1995-2005.	1.4	23
105	Islet amyloid polypeptide and calcitonin gene-related peptide expression are down-regulated in dorsal root ganglia upon sciatic nerve transection. Molecular Brain Research, 1997, 47, 322-330.	2.5	22
106	Differential changes in islet amyloid polypeptide (amylin) and insulin mRNA expression after high-fat diet-induced insulin resistance in C57BL/6J mice. Metabolism: Clinical and Experimental, 2000, 49, 1518-1522.	1.5	21
107	Enhanced cAMP Protein Kinase A Signaling Determines Improved Insulin Secretion in a Clonal Insulin-Producing Î²-Cell Line (INS-1 832/13). Molecular Endocrinology, 2004, 18, 2312-2320.	3.7	21
108	Glutamine-Elicited Secretion of Glucagon-Like Peptide 1 Is Governed by an Activated Glutamate Dehydrogenase. Diabetes, 2018, 67, 372-384.	0.3	20

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109	Lipases in the pancreatic Î²-cell: implications for insulin secretion. Biochemical Society Transactions, 2008, 36, 885-890.	1.6	19
110	The MafA-target gene PPP1R1A regulates GLP1R-mediated amplification of glucose-stimulated insulin secretion in Î²-cells. Metabolism: Clinical and Experimental, 2021, 118, 154734.	1.5	19
111	Cocaineâ€•and amphetamineâ€•regulated transcript is increased in Huntington disease. Movement Disorders, 2007, 22, 1952-1954.	2.2	18
112	The GTPase domain of gamma-tubulin is required for normal mitochondrial function and spatial organization. Communications Biology, 2018, 1, 37.	2.0	18
113	Metabolomics Analysis of Nutrient Metabolism in Î²-Cells. Journal of Molecular Biology, 2020, 432, 1429-1445.	2.0	16
114	Matrix metalloproteinases: keys to healthier blood vessels in diabetes?. Journal of Endocrinology, 2011, 210, 1-2.	1.2	14
115	Is shortening of telomeres the missing link between aging and the Type 2 Diabetes epidemic?. Aging, 2010, 2, 634-636.	1.4	13
116	Glutamate dehydrogenase, insulin secretion, and type 2 diabetes: a new means to protect the pancreatic Î²-cell?. Journal of Endocrinology, 2012, 212, 239-242.	1.2	12
117	The Transcriptional Co-Repressor Myeloid Translocation Gene 16 Inhibits Glycolysis and Stimulates Mitochondrial Respiration. PLoS ONE, 2013, 8, e68502.	1.1	12
118	Calcium modulation of exocytosis-linked plasma membrane potential oscillations in INS-1 832/13 cells. Biochemical Journal, 2015, 471, 111-122.	1.7	10
119	Ribosomal biogenesis regulator DIMT1 controls Î²-cell protein synthesis, mitochondrial function, and insulin secretion. Journal of Biological Chemistry, 2022, 298, 101692.	1.6	8
120	Pituitary adenylate cyclase activating polypeptide and nitric oxide synthase are expressed in the rat ciliary ganglion. British Journal of Ophthalmology, 1997, 81, 223-227.	2.1	7
121	Discriminative Prediction of A-To-I RNA Editing Events from DNA Sequence. PLoS ONE, 2016, 11, e0164962.	1.1	7
122	Differential effect of insulin treatment on islet amyloid polypeptide (amylin) and insulin gene expression in streptozotocin-induced diabetes in rats. Journal of Endocrinology, 1997, 152, 495-501.	1.2	6
123	Glycogen metabolism in the glucoseâ€sensing and supplyâ€driven Î²â€cell. FEBS Letters, 2016, 590, 4242-4251.	1.3	6
124	Metabolic coupling in pancreatic beta cells: lipolysis revisited. Diabetologia, 2016, 59, 2510-2513.	2.9	5
125	Unaltered pancreatic islet blood perfusion in islet amyloid polypeptide-deficient mice. European Journal of Endocrinology, 2002, 146, 107-112.	1.9	4
126	Islet Amyloid Polypeptide and Adrenomedullin. , 1999, , 515-549.		1

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127	Impact of IAPP deficiency on carbohydrate metabolism and insulin release. Experimental and Clinical Endocrinology and Diabetes, 1997, 105, 70-70.	0.6	0
128	Applications of In Situ Hybridization and Immunocytochemistry for Localization and Quantification of Peptide Gene Expression â€" A Lesson From Islet Amyloid Polypeptide. , 1996, , 115-137.		0
129	Blockade of muscarinic transmission increases the frequency of diabetes after low-dose alloxan challenge in the mouse. Diabetologia, 1996, 39, 383-390.	2.9	0