Bernard Thorens

List of Publications by Year
in descending order

102	10,103	48	93
papers	citations	h-index	g-index
		44069	40979

106	106	106	12180
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The SLC2 (GLUT) family of membrane transporters. Molecular Aspects of Medicine, 2013, 34, 121-138.	6.4	934
2	Cloning and functional expression in bacteria of a novel glucose transporter present in liver, intestine, kidney, and Î²-pancreatic islet cells. Cell, 1988, 55, 281-290.	28.9	831
3	Glucose transporters in the 21st Century. American Journal of Physiology - Endocrinology and Metabolism, 2010, 298, E141-E145.	3.5	746
4	The extended GLUT-family of sugar/polyol transport facilitators: nomenclature, sequence characteristics, and potential function of its novel members. Molecular Membrane Biology, 2001, 18, 247-256.	2.0	583
5	GLUT2, glucose sensing and glucose homeostasis. Diabetologia, 2015, 58, 221-232.	6.3	499
6	Early diabetes and abnormal postnatal pancreatic islet development in mice lacking Glut-2. Nature Genetics, 1997, 17, 327-330.	21.4	385
7	Postprandial macrophage-derived IL-1Î² stimulates insulin, and both synergistically promote glucose disposal and inflammation. Nature Immunology, 2017, 18, 283-292.	14.5	286
8	Brain Glucose Sensing, Counterregulation, and Energy Homeostasis. Physiology, 2007, 22, 241-251.	3.1	273
9	GLUT2 is a high affinity glucosamine transporter. FEBS Letters, 2002, 524, 199-203.	2.8	247
10	Heterogeneous metabolic adaptation of C57BL/6J mice to high-fat diet. American Journal of Physiology - Endocrinology and Metabolism, 2002, 282, E834-E842.	3.5	246
11	Fatty Acids Decrease IDX-1 Expression in Rat Pancreatic Islets and Reduce GLUT2, Glucokinase, Insulin, and Somatostatin Levels. Journal of Biological Chemistry, 1997, 272, 30261-30269.	3.4	242
12	Regulation of glucagon secretion by glucose transporter type 2 (glut2) and astrocyte-dependent glucose sensors. Journal of Clinical Investigation, 2005, 115, 3545-3553.	8.2	203
13	Gluco-incretins control insulin secretion at multiple levels as revealed in mice lacking GLP-1 and GIP receptors. Journal of Clinical Investigation, 2004, 113, 635-645.	8.2	201
14	Ins1 Cre knock-in mice for beta cell-specific gene recombination. Diabetologia, 2015, 58, 558-565.	6.3	182
15	Transgenic Reexpression of GLUT1 or GLUT2 in Pancreatic Î² Cells Rescues GLUT2-null Mice from Early Death and Restores Normal Glucose-stimulated Insulin Secretion. Journal of Biological Chemistry, 2000, 275, 23751-23758.	3.4	170
16	Plasma Dihydroceramides Are Diabetes Susceptibility Biomarker Candidates in Mice and Humans. Cell Reports, 2017, 18, 2269-2279.	6.4	168
17	Expression of the Glucagonâ€Like Peptideâ€1 Receptor Gene in Rat Brain. Journal of Neurochemistry, 1996, 66, 920-927.	3.9	160
18	MicroRNAs contribute to compensatory Î² cell expansion during pregnancy and obesity. Journal of Clinical Investigation, 2012, 122, 3541-3551.	8.2	148

#	Article	IF	Citations
19	Blocking VLDL secretion causes hepatic steatosis but does not affect peripheral lipid stores or insulin sensitivity in mice. Journal of Lipid Research, 2008, 49, 2038-2044.	4.2	136
20	Dexamethasone Induces Posttranslational Degradation of GLUT2 and Inhibition of Insulin Secretion in Isolated Pancreatic Î² Cells. Journal of Biological Chemistry, 1997, 272, 3216-3222.	3.4	131
21	Systems biology of the IMIDIA biobank from organ donors and pancreatectomised patients defines a novel transcriptomic signature of islets from individuals with type 2 diabetes. Diabetologia, 2018, 61, 641-657.	6.3	131
22	Distribution and anatomical localization of the glucose transporter 2 (GLUT2) in the adult rat brainâ€"an immunohistochemical study. Journal of Chemical Neuroanatomy, 2004, 28, 117-136.	2.1	130
23	Characterization of pancreatic NMDA receptors as possible drug targets for diabetes treatment. Nature Medicine, 2015, 21, 363-372.	30.7	126
24	Glucagon-Like Peptide-1 Protects Î²-Cells Against Apoptosis by Increasing the Activity of an Igf-2/Igf-1 Receptor Autocrine Loop. Diabetes, 2009, 58, 1816-1825.	0.6	118
25	Hepatic glucose sensing is required to preserve Î² cell glucose competence. Journal of Clinical Investigation, 2013, 123, 1662-1676.	8.2	118
26	Evidence From Glut2-Null Mice That Glucose Is a Critical Physiological Regulator of Feeding. Diabetes, 2006, 55, 988-995.	0.6	117
27	Hypoglycemia-Activated GLUT2 Neurons of the Nucleus Tractus Solitarius Stimulate Vagal Activity and Glucagon Secretion. Cell Metabolism, 2014, 19, 527-538.	16.2	114
28	Glucose-responsive neurons of the paraventricular thalamus control sucrose-seeking behavior. Nature Neuroscience, 2016, 19, 999-1002.	14.8	108
29	Gluco-incretins control insulin secretion at multiple levels as revealed in mice lacking GLP-1 and GIP receptors. Journal of Clinical Investigation, 2004, 113, 635-645.	8.2	104
30	The role of sodium-coupled glucose co-transporter 3 in the satiety effect of portal glucose sensing. Molecular Metabolism, 2013, 2, 47-53.	6.5	99
31	GLUT2 in pancreatic and extra-pancreatic gluco-detection. Molecular Membrane Biology, 2001, 18, 265-273.	2.0	96
32	Selective disruption of Tcf7l2 in the pancreatic Î² cell impairs secretory function and lowers Î² cell mass. Human Molecular Genetics, 2015, 24, 1390-1399.	2.9	89
33	Immunocytochemical localization of the glucose transporter 2 (GLUT2) in the adult rat brain. II. Electron microscopic study. Journal of Chemical Neuroanatomy, 2004, 28, 137-146.	2.1	82
34	Increasing GLP-1â€"Induced Î²-Cell Proliferation by Silencing the Negative Regulators of Signaling cAMP Response Element Modulator-Î± and DUSP14. Diabetes, 2008, 57, 584-593.	0.6	79
35	Glucagon-like Peptide-1 Increases Î²-Cell Glucose Competence and Proliferation by Translational Induction of Insulin-like Growth Factor-1 Receptor Expression. Journal of Biological Chemistry, 2010, 285, 10538-10545.	3.4	77
36	Multi-omics profiling of living human pancreatic islet donors reveals heterogeneous beta cell trajectories towards type 2 diabetes. Nature Metabolism, 2021, 3, 1017-1031.	11.9	76

#	Article	IF	Citations
37	Liver Hyperplasia and Paradoxical Regulation of Glycogen Metabolism and Glucose-sensitive Gene Expression in GLUT2-null Hepatocytes. Journal of Biological Chemistry, 2000, 275, 10930-10936.	3.4	72
38	Î±-cell glucokinase suppresses glucose-regulated glucagon secretion. Nature Communications, 2018, 9, 546.	12.8	72
39	Glut2â€dependent glucoseâ€sensing controls thermoregulation by enhancing the leptin sensitivity of NPY and POMC neurons. FASEB Journal, 2010, 24, 1747-1758.	0.5	69
40	Evidence That Extrapancreatic GLUT2-Dependent Glucose Sensors Control Glucagon Secretion. Diabetes, 2001, 50, 1282-1289.	0.6	68
41	Sensing of Glucose in the Brain. Handbook of Experimental Pharmacology, 2012, , 277-294.	1.8	66
42	Brain glucose sensing in homeostatic and hedonic regulation. Trends in Endocrinology and Metabolism, 2015, 26, 455-466.	7.1	66
43	Gut-derived signaling molecules and vagal afferents in the control of glucose and energy homeostasis. Current Opinion in Clinical Nutrition and Metabolic Care, 2004, 7, 471-478.	2.5	65
44	Persistent or Transient Human Î² Cell Dysfunction Induced by Metabolic Stress: Specific Signatures and Shared Gene Expression with Type 2 Diabetes. Cell Reports, 2020, 33, 108466.	6.4	65
45	Peroxisomal and Microsomal Lipid Pathways Associated with Resistance to Hepatic Steatosis and Reduced Pro-inflammatory State. Journal of Biological Chemistry, 2010, 285, 31011-31023.	3.4	63
46	Nervous glucose sensing regulates postnatal Î² cell proliferation and glucose homeostasis. Journal of Clinical Investigation, 2014, 124, 413-424.	8.2	62
47	Regulated exocytosis of an H+/myo-inositol symporter at synapses and growth cones. EMBO Journal, 2004, 23, 531-540.	7.8	60
48	GLUT4, AMP kinase, but not the insulin receptor, are required for hepatoportal glucose sensorâ€"stimulated muscle glucose utilization. Journal of Clinical Investigation, 2003, 111, 1555-1562.	8.2	50
49	Autocrine Action of IGF2 Regulates Adult Î²-Cell Mass and Function. Diabetes, 2015, 64, 4148-4157.	0.6	46
50	In Vivo Conditional Pax4 Overexpression in Mature Islet Î²-Cells Prevents Stress-Induced Hyperglycemia in Mice. Diabetes, 2011, 60, 1705-1715.	0.6	45
51	The Peroxisomal Enzyme L-PBE Is Required to Prevent the Dietary Toxicity of Medium-Chain Fatty Acids. Cell Reports, 2013, 5, 248-258.	6.4	45
52	Inhibition of glucose-induced insulin secretion by long-term preexposure of pancreatic islets to leptin. FEBS Letters, 1997, 415, 179-182.	2.8	44
53	Replication and cross-validation of type 2 diabetes subtypes based on clinical variables: an IMI-RHAPSODY study. Diabetologia, 2021, 64, 1982-1989.	6.3	44
54	Molecular phenotyping of multiple mouse strains under metabolic challenge uncovers a role for Elovl2 in glucose-induced insulin secretion. Molecular Metabolism, 2017, 6, 340-351.	6.5	42

#	Article	IF	Citations
55	Glucose release from GLUT2-null hepatocytes: characterization of a major and a minor pathway. American Journal of Physiology - Endocrinology and Metabolism, 2002, 282, E794-E801.	3.5	37
56	Encapsulated, Genetically Engineered Cells, Secreting Glucagonâ€like Peptideâ€1 for the Treatment of Nonâ€insulinâ€dependent Diabetes Mellitus. Annals of the New York Academy of Sciences, 1999, 875, 277-285.	3.8	32
57	Protective role of the ELOVL2/docosahexaenoic acid axis in glucolipotoxicity-induced apoptosis in rodent beta cells and human islets. Diabetologia, 2018, 61, 1780-1793.	6.3	32
58	Glutamine Stimulates Biosynthesis and Secretion of Insulin-like Growth Factor 2 (IGF2), an Autocrine Regulator of Beta Cell Mass and Function. Journal of Biological Chemistry, 2014, 289, 31972-31982.	3.4	31
59	GLUT4, AMP kinase, but not the insulin receptor, are required for hepatoportal glucose sensorâ€“stimulated muscle glucose utilization. Journal of Clinical Investigation, 2003, 111, 1555-1562.	8.2	31
60	Oxidative Phosphorylation Flexibility in the Liver of Mice Resistant to High-Fat Dietâ€“Induced Hepatic Steatosis. Diabetes, 2011, 60, 2216-2224.	0.6	30
61	Plac8 is required for White Adipocyte Differentiation in vitro and Cell Number Control in vivo. PLoS ONE, 2012, 7, e48767.	2.5	28
62	A gene knockout approach in mice to identify glucose sensors controlling glucose homeostasis. Pflugers Archiv European Journal of Physiology, 2003, 445, 482-490.	2.8	27
63	GLP-1 protects Î²-cells against apoptosis by enhancing the activity of an IGF-2/IGF1-receptor autocrine loop. Islets, 2009, 1, 280-282.	1.8	26
64	A Genetic Screen Identifies Hypothalamic Fgf15 as a Regulator of Glucagon Secretion. Cell Reports, 2016, 17, 1795-1806.	6.4	26
65	Laser capture microdissection of human pancreatic islets reveals novel eQTLs associated with type 2 diabetes. Molecular Metabolism, 2019, 24, 98-107.	6.5	26
66	Distinct Molecular Signatures of Clinical Clusters in People With Type 2 Diabetes: An IMI-RHAPSODY Study. Diabetes, 2021, 70, 2683-2693.	0.6	26
67	Clic4, a novel protein that sensitizes Î²-cells to apoptosis. Molecular Metabolism, 2015, 4, 253-264.	6.5	20
68	Sex-Specific Control of Fat Mass and Counterregulation by Hypothalamic Glucokinase. Diabetes, 2016, 65, 2920-2931.	0.6	20
69	Different Transcriptional Control of Metabolism and Extracellular Matrix in Visceral and Subcutaneous Fat of Obese and Rimonabant Treated Mice. PLoS ONE, 2008, 3, e3385.	2.5	20
70	Hypoglycemia-Sensing Neurons of the Ventromedial Hypothalamus Require AMPK-Induced Txn2 Expression but Are Dispensable for Physiological Counterregulation. Diabetes, 2020, 69, 2253-2266.	0.6	19
71	Plasma triacylglycerols are biomarkers of Î²-cell function in mice and humans. Molecular Metabolism, 2021, 54, 101355.	6.5	17
72	Fgf15 Neurons of the Dorsomedial Hypothalamus Control Glucagon Secretion and Hepatic Gluconeogenesis. Diabetes, 2021, 70, 1443-1457.	0.6	15

#	Article	IF	Citations
73	Ablation of glucokinase-expressing tanycytes impacts energy balance and increases adiposity in mice. Molecular Metabolism, 2021, 53, 101311.	6.5	15
74	Gluco-Incretins Regulate Beta-Cell Glucose Competence by Epigenetic Silencing of Fxyd3 Expression. PLoS ONE, 2014, 9, e103277.	2.5	12
75	Klf6 protects Î²-cells against insulin resistance-induced dedifferentiation. Molecular Metabolism, 2020, 35, 100958.	6.5	12
76	Opposite physiological and pathological mTORC1-mediated roles of the CB1 receptor in regulating renal tubular function. Nature Communications, 2022, 13, 1783.	12.8	12
77	A Toggle for Type 2 Diabetes?. New England Journal of Medicine, 2006, 354, 1636-1638.	27.0	11
78	Of Fat, Î² Cells, and Diabetes. Cell Metabolism, 2011, 14, 439-440.	16.2	11
79	Use of preclinical models to identify markers of type 2 diabetes susceptibility and novel regulators of insulin secretion â€" A step towards precision medicine. Molecular Metabolism, 2019, 27, S147-S154.	6.5	11
80	Glucokinase neurons of the paraventricular nucleus of the thalamus sense glucose and decrease food consumption. IScience, 2021, 24, 103122.	4.1	11
81	EphrinB1 modulates glutamatergic inputs into POMC-expressing progenitors and controls glucose homeostasis. PLoS Biology, 2020, 18, e3000680.	5.6	8
82	A missing sugar prevents glucose entry: A new twist on insulin secretion. Cell Metabolism, 2006, 3, 3-5.	16.2	7
83	Neuronal regulation of glucagon secretion and gluconeogenesis. Journal of Diabetes Investigation, 2022, 13, 599-607.	2.4	7
84	GLUT2-Expressing Neurons as Glucose Sensors in the Brain: Electrophysiological Analysis. Methods in Molecular Biology, 2018, 1713, 255-267.	0.9	6
85	Hypothalamic Irak4 is a genetically controlled regulator of hypoglycemia-induced glucagon secretion. Molecular Metabolism, 2022, 61, 101479.	6.5	6
86	Glucose transporter 2 mediates the hypoglycemia-induced increase in cerebral blood flow. Journal of Cerebral Blood Flow and Metabolism, 2019, 39, 1725-1736.	4.3	5
87	Homocysteine Metabolism Pathway Is Involved in the Control of Glucose Homeostasis: A Cystathionine Beta Synthase Deficiency Study in Mouse. Cells, 2022, 11, 1737.	4.1	5
88	The facilitative glucose transporter 2: pathophysiological role in mouse and human. , 2003, , 175-190.		4
89	A genetic screen identifies Crat as a regulator of pancreatic beta-cell insulin secretion. Molecular Metabolism, 2020, 37, 100993.	6.5	4
90	Cold-induced dishabituation in rodents exposed to recurrent hypoglycaemia. Diabetologia, 2021, 64, 1436-1441.	6.3	4

#	Article	IF	Citations
91	Engineering Tolerance into Transplanted Î² Cell Lines. Annals of the New York Academy of Sciences, 2001, 944, 267-270.	3.8	2
92	Targeting the Brain to Cure Type 2 Diabetes. Diabetes, 2019, 68, 476-478.	0.6	1
93	Development and preclinical assessment of a bioartificial pancreas. Swiss Medical Weekly, 2007, 137 Suppl 155, 68S-71S.	1.6	1
94	Alain Ktorza, PhD. Diabetes, Obesity and Metabolism, 2017, 19, 3-3.	4.4	0
95	DÃ©tection cÃ©rÃ©brale du glucose et homÃ©ostasie du glucose. Medecine Des Maladies Metaboliques, 2021, 15, 518-525.	0.1	0
96	Mike Mueckler (1953â€"2021): the father of the mammalian SLC2 glucose transporter family. American Journal of Physiology - Endocrinology and Metabolism, 2021, 321, E490-E492.	3.5	0
97	Title is missing!. , 2020, 18, e3000680.		0
98	Title is missing!. , 2020, 18, e3000680.		0
99	Title is missing!. , 2020, 18, e3000680.		0
100	Title is missing!. , 2020, 18, e3000680.		0
101	Title is missing!. , 2020, 18, e3000680.		0
102	Title is missing!. , 2020, 18, e3000680.		0