Trevor J Biden

List of Publications by Year
in descending order

78 papers	7,380 citations	66234 42 h-index	69108 77 g-index
78 all docs	78 docs citations	78 times ranked	9335 citing authors

#	Article	IF	Citations
1	Guidelines for the use and interpretation of assays for monitoring autophagy (4th) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 742 Td	4.3	1,430
2	Endoplasmic reticulum stress contributes to beta cell apoptosis in type 2 diabetes. Diabetologia, 2007, 50, 752-763.	2.9	735
3	Ceramide Generation Is Sufficient to Account for the Inhibition of the Insulin-stimulated PKB Pathway in C2C12 Skeletal Muscle Cells Pretreated with Palmitate. Journal of Biological Chemistry, 1999, 274, 24202-24210.	1.6	522
4	Rapid mobilization of Ca2+ from rat insulinoma microsomes by inositol-1,4,5-trisphosphate. Nature, 1984, 309, 562-564.	13.7	421
5	Expression Profiling of Palmitate- and Oleate-Regulated Genes Provides Novel Insights Into the Effects of Chronic Lipid Exposure on Pancreatic Â-Cell Function. Diabetes, 2002, 51, 977-987.	0.3	177
6	Lipotoxic endoplasmic reticulum stress, Î² cell failure, and type 2 diabetes mellitus. Trends in Endocrinology and Metabolism, 2014, 25, 389-398.	3.1	169
7	Increased Fatty Acid Desaturation and Enhanced Expression of Stearoyl Coenzyme A Desaturase Protects Pancreatic Â-Cells from Lipoapoptosis. Diabetes, 2005, 54, 2917-2924.	0.3	165
8	G protein-coupled receptor (GPR)40-dependent potentiation of insulin secretion in mouse islets is mediated by protein kinase D1. Diabetologia, 2012, 55, 2682-2692.	2.9	139
9	Reduced endoplasmic reticulum (ER)-to-Golgi protein trafficking contributes to ER stress in lipotoxic mouse beta cells by promoting protein overload. Diabetologia, 2009, 52, 2369-2373.	2.9	133
10	A lipidomic screen of palmitate-treated MIN6 Î²-cells links sphingolipid metabolites with endoplasmic reticulum (ER) stress and impaired protein trafficking. Biochemical Journal, 2011, 435, 267-276.	1.7	132
11	Chronic Hyperglycemia, Independent of Plasma Lipid Levels, Is Sufficient for the Loss of Â-Cell Differentiation and Secretory Function in the db/db Mouse Model of Diabetes. Diabetes, 2005, 54, 2755-2763.	0.3	130
12	PKCÎ´ Is Required for Mitochondrial-dependent Apoptosis in Salivary Epithelial Cells. Journal of Biological Chemistry, 2001, 276, 29719-29728.	1.6	127
13	Cytokine-Induced Î²-Cell Death Is Independent of Endoplasmic Reticulum Stress Signaling. Diabetes, 2008, 57, 3034-3044.	0.3	123
14	Protein Kinase C Function in Muscle, Liver, and Î²-Cells and Its Therapeutic Implications for Type 2 Diabetes. Diabetes, 2008, 57, 1774-1783.	0.3	122
15	Roles of ceramide and sphingolipids in pancreatic Î²-cell function and dysfunction. Islets, 2012, 4, 177-187.	0.9	122
16	Improved glucose homeostasis and enhanced insulin signalling in Grb14-deficient mice. EMBO Journal, 2004, 23, 582-593.	3.5	116
17	Alteration of Endoplasmic Reticulum Lipid Rafts Contributes to Lipotoxicity in Pancreatic Î²-Cells. Journal of Biological Chemistry, 2013, 288, 26569-26582.	1.6	107
18	Failure of the Adaptive Unfolded Protein Response in Islets of Obese Mice Is Linked With Abnormalities in Î²-Cell Gene Expression and Progression to Diabetes. Diabetes, 2013, 62, 1557-1568.	0.3	105

#	Article	IF	Citations
19	Protein Kinase CÎ¹ Activity Is Necessary for Bcr-Abl-mediated Resistance to Drug-induced Apoptosis. Journal of Biological Chemistry, 1999, 274, 3927-3930.	1.6	104
20	Signal Transduction in Insulin Secretion:.. Annals of the New York Academy of Sciences, 1986, 488, 317-333.	1.8	98
21	Identification of fatty acid binding protein 4 as an adipokine that regulates insulin secretion during obesity. Molecular Metabolism, 2014, 3, 465-473.	3.0	96
22	Protein Kinase CÎ´ Activation by Interleukin-1Î² Stabilizes Inducible Nitric-oxide Synthase mRNA in Pancreatic Î²-Cells. Journal of Biological Chemistry, 2001, 276, 5368-5374.	1.6	94
23	Phospholipase D1 Regulates Secretagogue-stimulated Insulin Release in Pancreatic Î²-Cells. Journal of Biological Chemistry, 2004, 279, 27534-27541.	1.6	84
24	Inhibition of PKCÉ› Improves Glucose-Stimulated Insulin Secretion and Reduces Insulin Clearance. Cell Metabolism, 2007, 6, 320-328.	7.2	80
25	Secretin stimulates cyclic AMP and inositol trisphosphate production in rat pancreatic acinar tissue by two fully independent mechanisms.. Proceedings of the National Academy of Sciences of the United States of America, 1987, 84, 3146-3150.	3.3	78
26	Akt Mediates Insulin-stimulated Phosphorylation of Ndrg2. Journal of Biological Chemistry, 2004, 279, 18623-18632.	1.6	76
27	Quantitative and functional characterization of muscarinic receptor subtypes in insulin-secreting cell lines and rat pancreatic islets. Diabetes, 2000, 49, 392-398.	0.3	75
28	Muscle lipid accumulation and protein kinase C activation in the insulin-resistant chronically glucose-infused rat. American Journal of Physiology - Endocrinology and Metabolism, 1999, 277, E1070-E1076.	1.8	71
29	High dietary fat and sucrose result in an extensive and time-dependent deterioration in health of multiple physiological systems in mice. Journal of Biological Chemistry, 2018, 293, 5731-5745.	1.6	65
30	Differential regulation of adaptive and apoptotic unfolded protein response signalling by cytokine-induced nitric oxide production in mouse pancreatic beta cells. Diabetologia, 2011, 54, 1766-1776.	2.9	58
31	Inhibition of Protein Kinase C Â Protects Rat INS-1 Cells Against Interleukin-1Â and Streptozotocin-Induced Apoptosis. Diabetes, 2002, 51, 317-324.	0.3	56
32	Treatment of type 2 diabetes with the designer cytokine IC7Fc. Nature, 2019, 574, 63-68.	13.7	55
33	Time-dependent effects of Prkce deletion on glucose homeostasis and hepatic lipid metabolism on dietary lipid oversupply in mice. Diabetologia, 2011, 54, 1447-1456.	2.9	51
34	Evidence for Selective Coupling of Î±1-Adrenergic Receptors to Phospholipase C-Î²1 in Rat Neonatal Cardiomyocytes. Journal of Biological Chemistry, 2001, 276, 37341-37346.	1.6	50
35	High-fat diet increases autophagic flux in pancreatic beta cells in vivo and ex vivo in mice. Diabetologia, 2015, 58, 2074-2078.	2.9	50
36	Chronic Effects of Fatty Acids on Pancreatic Â-Cell Function: New Insights From Functional Genomics. Diabetes, 2004, 53, S159-S165.	0.3	49

#	Article	IF	Citations
37	Diverse roles for protein kinase C Î´ and protein kinase C Îµ in the generation of high-fat-diet-induced glucose intolerance in mice: regulation of lipogenesis by protein kinase C Î´. Diabetologia, 2009, 52, 2616-2620.	2.9	49
38	Synergistic Interaction of Y1-Neuropeptide Y and Î±1b-Adrenergic Receptors in the Regulation of Phospholipase C, Protein Kinase C, and Arachidonic Acid Production. Journal of Biological Chemistry, 1995, 270, 11789-11796.	1.6	47
39	A redistribution of actin and myosin IIA accompanies Ca2+-dependent insulin secretion. FEBS Letters, 2001, 492, 101-106.	1.3	47
40	Acute reversal of lipid-induced muscle insulin resistance is associated with rapid alteration in PKC-Î¸ localization. American Journal of Physiology - Endocrinology and Metabolism, 2000, 279, E1196-E1201.	1.8	45
41	Phosphorylation of Nonmuscle Myosin Heavy Chain IIA on Ser1917 Is Mediated by Protein Kinase CÎ²II and Coincides with the Onset of Stimulated Degranulation of RBL-2H3 Mast Cells. Journal of Immunology, 2006, 177, 1492-1499.	0.4	45
42	Signal Transduction in Insulin Secretion:.. Annals of the New York Academy of Sciences, 1986, 488, 317-333.	1.8	44
43	Deletion of PKCÎµ Selectively Enhances the Amplifying Pathways of Glucose-Stimulated Insulin Secretion via Increased Lipolysis in Mouse Î²-Cells. Diabetes, 2009, 58, 1826-1834.	0.3	43
44	Sulfonylureas as Concomitant Insulin Secretagogues and NLRP3 Inflammasome Inhibitors. ChemMedChem, 2017, 12, 1449-1457.	1.6	42
45	Protein Kinase C Epsilon Deletion in Adipose Tissue, but Not in Liver, Improves Glucose Tolerance. Cell Metabolism, 2019, 29, 183-191.e7.	7.2	42
46	Inhibition of PKCÎ± induces a PKCÎ´-dependent apoptotic program in salivary epithelial cells. Cell Death and Differentiation, 2003, 10, 269-277.	5.0	40
47	Lysosomal acid lipase and lipophagy are constitutive negative regulators of glucose-stimulated insulin secretion from pancreatic beta cells. Diabetologia, 2014, 57, 129-139.	2.9	38
48	PKCÂ Blues for the Â-Cell. Diabetes, 2010, 59, 1-3.	0.3	37
49	Regulation of mitochondrial metabolism in murine skeletal muscle by the mediumâ€chain fatty acid receptor Gpr84. FASEB Journal, 2019, 33, 12264-12276.	0.2	36
50	Structural and Biochemical Studies of Human Galanin: NMR Evidence for Nascent Helical Structures in Aqueous Solution. Biochemistry, 1995, 34, 4538-4545.	1.2	33
51	PKCÂ Is Activated But Not Required During Glucose-Induced Insulin Secretion From Rat Pancreatic Islets. Diabetes, 2004, 53, 53-60.	0.3	33
52	Deletion of protein kinase CÎ´ in mice modulates stability of inflammatory genes and protects against cytokine-stimulated beta cell death in vitro and in vivo. Diabetologia, 2011, 54, 380-389.	2.9	33
53	Reversal of chronic alterations of skeletal muscle protein kinase C from fat-fed rats by BRL-49653. American Journal of Physiology - Endocrinology and Metabolism, 1997, 273, E915-E921.	1.8	32
54	Synergistic cytotoxicity between tamoxifen and the plant toxin persin in human breast cancer cells is dependent on Bim expression and mediated by modulation of ceramide metabolism. Molecular Cancer Therapeutics, 2007, 6, 2777-2785.	1.9	32

#	Article	IF	Citations
55	SMOC1 is a glucose-responsive hepatokine and therapeutic target for glycemic control. Science Translational Medicine, 2020, 12, .	5.8	29
56	The diverse roles of protein kinase C in pancreatic Î²-cell function. Biochemical Society Transactions, 2008, 36, 916-919.	1.6	28
57	Increases in phosphorylation of the myosin II heavy chain, but not regulatory light chains, correlate with insulin secretion in rat pancreatic islets and RINm5F cells. Diabetes, 1999, 48, 2383-2389.	0.3	26
58	Disruption of beta cell acetyl-CoA carboxylase-1 in mice impairs insulin secretion and beta cell mass. Diabetologia, 2019, 62, 99-111.	2.9	24
59	Cross-talk between the unfolded protein response and nuclear factor-ÎºB signalling pathways regulates cytokine-mediated beta cell death in MIN6 cells and isolated mouse islets. Diabetologia, 2012, 55, 2999-3009.	2.9	23
60	Glucose Homeostasis in Mice Is Transglutaminase 2 Independent. PLoS ONE, 2013, 8, e63346.	1.1	23
61	A comprehensive lipidomic screen of pancreatic Î²-cells using mass spectroscopy defines novel features of glucose-stimulated turnover of neutral lipids, sphingolipids and plasmalogens. Molecular Metabolism, 2016, 5, 404-414.	3.0	23
62	Dilinoleoyl-phosphatidic acid mediates reduced IRS-1 tyrosine phosphorylation in rat skeletal muscle cells and mouse muscle. Diabetologia, 2007, 50, 1732-1742.	2.9	22
63	A Selective Look at Autophagy in Pancreatic Î²-Cells. Diabetes, 2021, 70, 1229-1241.	0.3	21
64	Nutrient Stimulation Results in a Rapid Ca2+-dependent Threonine Phosphorylation of Myosin Heavy Chain in Rat Pancreatic Islets and RINm5F Cells. Journal of Biological Chemistry, 1998, 273, 22729-22737.	1.6	20
65	Short-term inhibition of autophagy benefits pancreatic Î²-cells by augmenting ether lipids and peroxisomal function, and by countering depletion of n-3 polyunsaturated fatty acids after fat-feeding. Molecular Metabolism, 2020, 40, 101023.	3.0	17
66	Exposure to depolarizing concentrations of K+ inhibits hormonally-induced calcium influx in rat liver. Biochemical and Biophysical Research Communications, 1988, 153, 1282-1289.	1.0	16
67	Oleate disrupts cAMP signaling, contributing to potent stimulation of pancreatic Î²-cell autophagy. Journal of Biological Chemistry, 2019, 294, 1218-1229.	1.6	16
68	Characterization of two forms of protein kinase C Î±, with different substrate specificities, from skeletal muscle. Biochemical Journal, 1996, 320, 207-214.	1.7	14
69	Phospholipase C-Î³ Mediates the Hydrolysis of Phosphatidylinositol, but Not of Phosphatidylinositol 4,5-Bisphoshate, in Carbamylcholine-stimulated Islets of Langerhans. Journal of Biological Chemistry, 2001, 276, 19072-19077.	1.6	14
70	Bad News for Î²-Cell Apoptosis. Diabetes, 2009, 58, 1725-1727.	0.3	14
71	Targeting triglyceride/fatty acid cycling in Î²-cells as a therapy for augmenting glucose-stimulated insulin secretion. Islets, 2010, 2, 127-129.	0.9	14
72	Role of endoplasmic reticulum stress induction by the plant toxin, persin, in overcoming resistance to the apoptotic effects of tamoxifen in human breast cancer cells. British Journal of Cancer, 2013, 109, 3034-3041.	2.9	14

#	Article	IF	Citations
73	An Antisense of Protein Kinase C-Î¶ Inhibits Proliferation of Human Airway Smooth Muscle Cells. American Journal of Respiratory Cell and Molecular Biology, 2000, 23, 555-559.	1.4	13
74	Sweet and Sour Î²-Cells: ROS and Hif1Î± Induce Warburg-Like Lactate Production During Type 2 Diabetes. Diabetes, 2013, 62, 1823-1825.	0.3	12
75	Heparan sulfate proteoglycans in beta cells provide a critical link between endoplasmic reticulum stress, oxidative stress and type 2 diabetes. PLoS ONE, 2021, 16, e0252607.	1.1	9
76	Phospholipase CÎ´1 does not mediate Ca2+ responses in neonatal rat cardiomyocytes. FEBS Letters, 2003, 546, 325-328.	1.3	4
77	The potentiating effects of ketone bodies on insulin secretion. Biochemical Society Transactions, 1982, 10, 391-392.	1.6	1
78	P-101: Alterations in the expression and cellular localization of protein kinase C isozymes are associated with insulin resistance in skeletal muscle of the high-fat-fed rat. Experimental and Clinical Endocrinology and Diabetes, 1996, 104, 161-162.	0.6	0