Roland Stein

List of Publications by Year
in descending order

66 papers	5,770 citations	76326 40 h-index	102487 66 g-index
72 all docs	72 docs citations	72 times ranked	5384 citing authors

#	Article	IF	Citations
1	Inactivation of specific Î² cell transcription factors in type 2 diabetes. Journal of Clinical Investigation, 2013, 123, 3305-3316.	8.2	414
2	Pdx1 Maintains Î² Cell Identity and Function by Repressing an Î± Cell Program. Cell Metabolism, 2014, 19, 259-271.	16.2	325
3	Members of the Large Maf Transcription Family Regulate Insulin Gene Transcription in Islet Î² Cells. Molecular and Cellular Biology, 2003, 23, 6049-6062.	2.3	279
4	The MafA transcription factor appears to be responsible for tissue-specific expression of insulin. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2930-2933.	7.1	258
5	MafB is required for islet Î² cell maturation. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 3853-3858.	7.1	223
6	MafA and MafB Regulate Genes Critical to Î²-Cells in a Unique Temporal Manner. Diabetes, 2010, 59, 2530-2539.	0.6	217
7	Oxidative Stress-mediated, Post-translational Loss of MafA Protein as a Contributing Mechanism to Loss of Insulin Gene Expression in Glucotoxic Beta Cells. Journal of Biological Chemistry, 2005, 280, 11107-11113.	3.4	192
8	MafA and MafB activity in pancreatic Î² cells. Trends in Endocrinology and Metabolism, 2011, 22, 364-373.	7.1	187
9	MafB. Diabetes, 2006, 55, 297-304.	0.6	178
10	Insulin Gene Transcription Is Mediated by Interactions between the p300 Coactivator and PDX-1, BETA2, and E47. Molecular and Cellular Biology, 2002, 22, 412-420.	2.3	167
11	The Islet Î² Cell-enriched MafA Activator Is a Key Regulator of Insulin Gene Transcription. Journal of Biological Chemistry, 2005, 280, 11887-11894.	3.4	165
12	Interrupted Glucagon Signaling Reveals Hepatic Î± Cell Axis and Role for L-Glutamine in Î± Cell Proliferation. Cell Metabolism, 2017, 25, 1362-1373.e5.	16.2	153
13	Î± Cell Function and Gene Expression Are Compromised in Type 1 Diabetes. Cell Reports, 2018, 22, 2667-2676.	6.4	152
14	SARS-CoV-2 Cell Entry Factors ACE2 and TMPRSS2 Are Expressed in the Microvasculature and Ducts of Human Pancreas but Are Not Enriched in Î² Cells. Cell Metabolism, 2020, 32, 1028-1040.e4.	16.2	148
15	Pancreatic Î² Cell-specific Transcription of thepdx-1 Gene. Journal of Biological Chemistry, 2000, 275, 3485-3492.	3.4	141
16	p300 Mediates Transcriptional Stimulation by the Basic Helix-Loop-Helix Activators of the Insulin Gene. Molecular and Cellular Biology, 1998, 18, 2957-2964.	2.3	133
17	Islet-1 is Required for the Maturation, Proliferation, and Survival of the Endocrine Pancreas. Diabetes, 2009, 58, 2059-2069.	0.6	125
18	FoxA2, Nkx2.2, and PDX-1 Regulate Islet Î²-Cell-Specific mafA Expression through Conserved Sequences Located between Base Pairs â˜8118 and â˜7750 Upstream from the Transcription Start Site. Molecular and Cellular Biology, 2006, 26, 5735-5743.	2.3	112

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19	The Role of Hepatic Nuclear Factor 1Î± and PDX-1 in Transcriptional Regulation of the pdx-1 Gene. Journal of Biological Chemistry, 2001, 276, 47775-47784.	3.4	108
20	The MafA Transcription Factor Becomes Essential to Islet Î²-Cells Soon After Birth. Diabetes, 2014, 63, 1994-2005.	0.6	106
21	MODY7 Gene, KLF11, Is a Novel p300-dependent Regulator of Pdx-1 (MODY4) Transcription in Pancreatic Islet Î² Cells. Journal of Biological Chemistry, 2009, 284, 36482-36490.	3.4	94
22	MafA Regulates Expression of Genes Important to Islet Î²-Cell Function. Molecular Endocrinology, 2007, 21, 2764-2774.	3.7	89
23	<i>MAFA</i> missense mutation causes familial insulinomatosis and diabetes mellitus. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1027-1032.	7.1	88
24	Stress-impaired transcription factor expression and insulin secretion in transplanted human islets. Journal of Clinical Investigation, 2016, 126, 1857-1870.	8.2	86
25	Transcription Factor Occupancy of the Insulin Gene in Vivo. Journal of Biological Chemistry, 2003, 278, 751-756.	3.4	80
26	Conserved Sequences in a Tissue-Specific Regulatory Region of the pdx-1 Gene Mediate Transcription in Pancreatic Î² Cells: Role for Hepatocyte Nuclear Factor 3Î² and Pax6. Molecular and Cellular Biology, 2002, 22, 4702-4713.	2.3	74
27	Synaptotagmin 4 Regulates Pancreatic Î² Cell Maturation by Modulating the Ca2+ Sensitivity of Insulin Secretion Vesicles. Developmental Cell, 2018, 45, 347-361.e5.	7.0	73
28	Disruption of a Novel KrÃ¼ppel-like Transcription Factor p300-regulated Pathway for Insulin Biosynthesis Revealed by Studies of the c.-331 INS Mutation Found in Neonatal Diabetes Mellitus. Journal of Biological Chemistry, 2011, 286, 28414-28424.	3.4	72
29	Glucose stimulates the activation domain potential of the PDX-1 homeodomain transcription factor. FEBS Letters, 1998, 431, 362-366.	2.8	68
30	Conserved Transcriptional Regulatory Domains of the pdx-1 Gene. Molecular Endocrinology, 2004, 18, 533-548.	3.7	67
31	Islet-1 Is Essential for Pancreatic Î²-Cell Function. Diabetes, 2014, 63, 4206-4217.	0.6	67
32	Revealing transcription factors during human pancreatic Î² cell development. Trends in Endocrinology and Metabolism, 2014, 25, 407-414.	7.1	62
33	MLL3 and MLL4 Methyltransferases Bind to the MAFA and MAFB Transcription Factors to Regulate Islet Î²-Cell Function. Diabetes, 2015, 64, 3772-3783.	0.6	59
34	Preserving Mafa Expression in Diabetic Islet Î²-Cells Improves Glycemic Control in Vivo. Journal of Biological Chemistry, 2015, 290, 7647-7657.	3.4	54
35	The Islet à¥† Cell-enriched RIPE3b1/Maf Transcription Factor Regulates pdx-1 Expression. Journal of Biological Chemistry, 2003, 278, 12263-12270.	3.4	53
36	Dynamic Recruitment of Functionally Distinct Swi/Snf Chromatin Remodeling Complexes Modulates Pdx1 Activity in Islet Î² Cells. Cell Reports, 2015, 10, 2032-2042.	6.4	53

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37	Mafa Enables Pdx1 to Effectively Convert Pancreatic Islet Progenitors and Committed Islet Î±-Cells Into Î²-Cells In Vivo. Diabetes, 2017, 66, 1293-1300.	0.6	52
38	Defining a Novel Role for the Pdx1 Transcription Factor in Islet Î²-Cell Maturation and Proliferation During Weaning. Diabetes, 2017, 66, 2830-2839.	0.6	51
39	The MAFB transcription factor impacts islet Î±-cell function in rodents and represents a unique signature of primate islet Î²-cells. American Journal of Physiology - Endocrinology and Metabolism, 2016, 310, E91-E102.	3.5	49
40	Transcriptional analysis of intracytoplasmically stained, FACS-purified cells by high-throughput, quantitative nuclease protection. Nature Biotechnology, 2009, 27, 1038-1042.	17.5	44
41	Islet Î²-Cell-Specific <i>MafA</i> Transcription Requires the 5â€²-Flanking Conserved Region 3 Control Domain. Molecular and Cellular Biology, 2010, 30, 4234-4244.	2.3	42
42	MafA is a dedicated activator of the insulin gene in vivo. Journal of Endocrinology, 2008, 198, 271-279.	2.6	41
43	The FOXP1, FOXP2 and FOXP4 transcription factors are required for islet alpha cell proliferation and function in mice. Diabetologia, 2015, 58, 1836-1844.	6.3	41
44	Lipid Droplet Accumulation in Human Pancreatic Islets Is Dependent On Both Donor Age and Health. Diabetes, 2020, 69, 342-354.	0.6	41
45	The Stability and Transactivation Potential of the Mammalian MafA Transcription Factor Are Regulated by Serine 65 Phosphorylation. Journal of Biological Chemistry, 2009, 284, 759-765.	3.4	37
46	Islet Î±-, Î²-, and Î´-Cell Development Is Controlled by the Ldb1 Coregulator, Acting Primarily With the Islet-1 Transcription Factor. Diabetes, 2013, 62, 875-886.	0.6	37
47	Transcriptional Activity of the Islet Î² Cell Factor Pdx1 Is Augmented by Lysine Methylation Catalyzed by the Methyltransferase Set7/9. Journal of Biological Chemistry, 2015, 290, 9812-9822.	3.4	37
48	Decellularized Tissue Matrix Enhances Self-Assembly of Islet Organoids from Pluripotent Stem Cell Differentiation. ACS Biomaterials Science and Engineering, 2020, 6, 4155-4165.	5.2	37
49	Loss of the transcription factor MAFB limits Î²-cell derivation from human PSCs. Nature Communications, 2020, 11, 2742.	12.8	37
50	Examining How the MAFB Transcription Factor Affects Islet Î²-Cell Function Postnatally. Diabetes, 2019, 68, 337-348.	0.6	36
51	The Pdx1-Bound Swi/Snf Chromatin Remodeling Complex Regulates Pancreatic Progenitor Cell Proliferation and Mature Islet Î²-Cell Function. Diabetes, 2019, 68, 1806-1818.	0.6	31
52	MafA-Controlled Nicotinic Receptor Expression Is Essential for Insulin Secretion and Is Impaired in Patients with Type 2 Diabetes. Cell Reports, 2016, 14, 1991-2002.	6.4	27
53	Sex-biased islet Î² cell dysfunction is caused by the MODY MAFA S64F variant by inducing premature aging and senescence in males. Cell Reports, 2021, 37, 109813.	6.4	27
54	Phosphorylation within the MafA N Terminus Regulates C-terminal Dimerization and DNA Binding. Journal of Biological Chemistry, 2010, 285, 12655-12661.	3.4	25

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55	Interactions between Areas I and II Direct pdx-1 Expression Specifically to Islet Cell Types of the Mature and Developing Pancreas. Journal of Biological Chemistry, 2005, 280, 38438-38444.	3.4	22
56	Combinatorial transcription factor profiles predict mature and functional human islet Î± and Î² cells. JCI Insight, 2021, 6, .	5.0	22
57	Lack of Prox1 Downregulation Disrupts the Expansion and Maturation of Postnatal Murine Î²-Cells. Diabetes, 2016, 65, 687-698.	0.6	18
58	Inhibition of human insulin gene transcription and MafA transcriptional activity by the dual leucine zipper kinase. Cellular Signalling, 2014, 26, 1792-1799.	3.6	15
59	Identification of direct transcriptional targets of NFATC2 that promote Î² cell proliferation. Journal of Clinical Investigation, 2021, 131, .	8.2	15
60	Lipid Droplets Protect Human Î²-Cells From Lipotoxicity-Induced Stress and Cell Identity Changes. Diabetes, 2021, 70, 2595-2607.	0.6	12
61	Myt Transcription Factors Prevent Stress-Response Gene Overactivation to Enable Postnatal Pancreatic Î² Cell Proliferation, Function, and Survival. Developmental Cell, 2020, 53, 390-405.e10.	7.0	11
62	Lipid Dropletsâ€™ Role in the Regulation of Î²-Cell Function and Î²-Cell Demise in Type 2 Diabetes. Endocrinology, 2022, 163, .	2.8	11
63	The mammal-specific <i>Pdx1</i> Area II enhancer has multiple essential functions in early endocrine-cell specification and postnatal Î²-cell maturation. Development (Cambridge), 2017, 144, 248-257.	2.5	10
64	Characterization of an Apparently Novel Î²-Cell Line-enriched 80â€“88 kDa Transcriptional Activator of the MafA and Pdx1 Genes. Journal of Biological Chemistry, 2013, 288, 3795-3803.	3.4	4
65	Analysis of the Role of E2A-Encoded Proteins in Insulin Gene Transcription. Molecular Endocrinology, 1997, 11, 1608-1617.	3.7	4
66	Analysis of an insulin gene transcription control element. FEBS Letters, 1994, 338, 187-190.	2.8	3