Rohit N Kulkarni

List of Publications by Year
in descending order

113 papers	8,638 citations	66234 42 h-index	45213 90 g-index
118 all docs	118 docs citations	118 times ranked	9680 citing authors

#	Article	IF	Citations
1	Insulin regulates arginine-stimulated insulin secretion in humans. Metabolism: Clinical and Experimental, 2022, 128, 155117.	1.5	9
2	Abnormal exocrineâ€"endocrine cell cross-talk promotes Î²-cell dysfunction and loss in MODY8. Nature Metabolism, 2022, 4, 76-89.	5.1	25
3	Gut Microbiota Regulate Pancreatic Growth, Exocrine Function, and Gut Hormones. Diabetes, 2022, 71, 945-960.	0.3	6
4	Hepatic IRF3 fuels dysglycemia in obesity through direct regulation of <i>Ppp2r1b</i>. Science Translational Medicine, 2022, 14, eabh3831.	5.8	11
5	New-found brake calibrates insulin action in Î²-cells. Nature, 2021, 590, 221-223.	13.7	2
6	Defective insulin receptor signaling in hPSCs skews pluripotency and negatively perturbs neural differentiation. Journal of Biological Chemistry, 2021, 296, 100495.	1.6	2
7	A Systematic Comparison of Protocols for Recovery of High-Quality RNA from Human Islets Extracted by Laser Capture Microdissection. Biomolecules, 2021, 11, 625.	1.8	5
8	Using single-nucleus RNA-sequencing to interrogate transcriptomic profiles of archived human pancreatic islets. Genome Medicine, 2021, 13, 128.	3.6	15
9	Differential roles of FOXO transcription factors on insulin action in brown and white adipose tissue. Journal of Clinical Investigation, 2021, 131, .	3.9	14
10	Insulin receptor substrate 1, but not IRS2, plays a dominant role in regulating pancreatic alpha cell function in mice. Journal of Biological Chemistry, 2021, 296, 100646.	1.6	9
11	Harnessing reaction-based probes to preferentially target pancreatic Î²-cells and Î²-like cells. Life Science Alliance, 2021, 4, e202000840.	1.3	10
12	Comprehensive Proteomics Analysis of Stressed Human Islets Identifies GDF15 as a Target for Type 1 Diabetes Intervention. Cell Metabolism, 2020, 31, 363-374.e6.	7.2	78
13	Dynamic proteome profiling of human pluripotent stem cell-derived pancreatic progenitors. Stem Cells, 2020, 38, 542-555.	1.4	6
14	Luseogliflozin increases beta cell proliferation through humoral factors that activate an insulin receptor- and IGF-1 receptor-independent pathway. Diabetologia, 2020, 63, 577-587.	2.9	25
15	Epigenetics in Î²-cell adaptation and type 2 diabetes. Current Opinion in Pharmacology, 2020, 55, 125-131.	1.7	10
16	Leptin Receptor Signaling Regulates Protein Synthesis Pathways and Neuronal Differentiation in Pluripotent Stem Cells. Stem Cell Reports, 2020, 15, 1067-1079.	2.3	2
17	Native Zinc Catalyzes Selective and Traceless Release of Small Molecules in Î²-Cells. Journal of the American Chemical Society, 2020, 142, 6477-6482.	6.6	20
18	Maternal and paternal exercise regulate offspring metabolic health and beta cell phenotype. BMJ Open Diabetes Research and Care, 2020, 8, e000890.	1.2	31

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19	More is better: combinatorial therapy to restore Î²-cell function in diabetes. Nature Metabolism, 2020, 2, 130-131.	5.1	5
20	A MAFG-lncRNA axis links systemic nutrient abundance to hepatic glucose metabolism. Nature Communications, 2020, 11, 644.	5.8	29
21	Parental metabolic syndrome epigenetically reprograms offspring hepatic lipid metabolism in mice. Journal of Clinical Investigation, 2020, 130, 2391-2407.	3.9	42
22	Early results of medial opening wedge high tibial osteotomy using an intraosseous implant with accelerated rehabilitation. European Journal of Orthopaedic Surgery and Traumatology, 2019, 29, 147-156.	0.6	8
23	m6A mRNA methylation regulates human Î²-cell biology in physiological states and in type 2 diabetes. Nature Metabolism, 2019, 1, 765-774.	5.1	158
24	How, When, and Where Do Human Î²-Cells Regenerate?. Current Diabetes Reports, 2019, 19, 48.	1.7	23
25	â€œOmicsâ€•and â€œepi-omicsâ€•underlying the Î²-cell adaptation to insulin resistance. Molecular Metabolism, 2019, 27, S42-S48.	3.0	19
26	HNF4A Haploinsufficiency in MODY1 Abrogates Liver and Pancreas Differentiation from Patient-Derived Induced Pluripotent Stem Cells. IScience, 2019, 16, 192-205.	1.9	37
27	Toll-like receptors TLR2 and TLR4 block the replication of pancreatic Î² cells in diet-induced obesity. Nature Immunology, 2019, 20, 677-686.	7.0	48
28	Î²-Cell Fate in Human Insulin Resistance and Type 2 Diabetes: A Perspective on Islet Plasticity. Diabetes, 2019, 68, 1121-1129.	0.3	87
29	Increased Î²-cell proliferation before immune cell invasion prevents progression of type 1 diabetes. Nature Metabolism, 2019, 1, 509-518.	5.1	38
30	Loss-of-Function Mutation in Thiamine Transporter 1 in a Family With Autosomal Dominant Diabetes. Diabetes, 2019, 68, 1084-1093.	0.3	16
31	RADAR: differential analysis of MeRIP-seq data with a random effect model. Genome Biology, 2019, 20, 294.	3.8	46
32	Forkhead box protein O1 (FoxO1) regulates hepatic serine protease inhibitor B1 (serpinB1) expression in a non-cell-autonomous fashion. Journal of Biological Chemistry, 2019, 294, 1059-1069.	1.6	10
33	Human duct cells contribute to Î² cell compensation in insulin resistance. JCI Insight, 2019, 4, .	2.3	43
34	Signaling between pancreatic Î² cells and macrophages via S100 calcium-binding protein A8 exacerbates Î²-cell apoptosis and islet inflammation. Journal of Biological Chemistry, 2018, 293, 5934-5946.	1.6	32
35	Blockade of cannabinoid 1 receptor improves glucose responsiveness in pancreatic beta cells. Journal of Cellular and Molecular Medicine, 2018, 22, 2337-2345.	1.6	21
36	The role of the carboxyl ester lipase (CEL) gene in pancreatic disease. Pancreatology, 2018, 18, 12-19.	0.5	60

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37	Attenuation of <scp>PKC</scp> Î´ enhances metabolic activity and promotes expansion of blood progenitors. EMBO Journal, 2018, 37, .	3.5	5
38	Fluorescent probes for G-protein-coupled receptor drug discovery. Expert Opinion on Drug Discovery, 2018, 13, 933-947.	2.5	37
39	Insulin receptor-mediated signaling regulates pluripotency markers and lineage differentiation. Molecular Metabolism, 2018, 18, 153-163.	3.0	18
40	Sex differences underlying pancreatic islet biology and its dysfunction. Molecular Metabolism, 2018, 15, 82-91.	3.0	90
41	Glucose Controls the Expression of Polypyrimidine Tract-Binding Protein 1 via the Insulin Receptor Signaling Pathway in Pancreatic Î² Cells. Molecules and Cells, 2018, 41, 909-916.	1.0	6
42	Adipocyte Dynamics and Reversible Metabolic Syndrome in Mice with an Inducible Adipocyte-Specific Deletion of the Insulin Receptor. Cell Metabolism, 2017, 25, 448-462.	7.2	91
43	Insulin Signaling Regulates the FoxM1/PLK1/CENP-A Pathway to Promote Adaptive Pancreatic Î²ÂCell Proliferation. Cell Metabolism, 2017, 25, 868-882.e5.	7.2	86
44	Heterogeneity of proliferative markers in pancreatic Î²-cells of patients with severe hypoglycemia following Roux-en-Y gastric bypass. Acta Diabetologica, 2017, 54, 737-747.	1.2	13
45	GLP-1 signalling compensates for impaired insulin signalling in regulating beta cell proliferation in Î²IRKO mice. Diabetologia, 2017, 60, 1442-1453.	2.9	33
46	Age-dependent insulin resistance in male mice with null deletion of the carcinoembryonic antigen-related cell adhesion molecule 2 gene. Diabetologia, 2017, 60, 1751-1760.	2.9	5
47	Isoform-selective inhibitor of histone deacetylase 3 (HDAC3) limits pancreatic islet infiltration and protects female nonobese diabetic mice from diabetes. Journal of Biological Chemistry, 2017, 292, 17598-17608.	1.6	43
48	Nuclear import of glucokinase in pancreatic beta-cells is mediated by a nuclear localization signal and modulated by SUMOylation. Molecular and Cellular Endocrinology, 2017, 454, 146-157.	1.6	5
49	Fibroblast Growth Factor 21 (FGF21) Protects against High Fat Diet Induced Inflammation and Islet Hyperplasia in Pancreas. PLoS ONE, 2016, 11, e0148252.	1.1	90
50	Proinflammatory Cytokines Induce Endocrine Differentiation in Pancreatic Ductal Cells via STAT3-Dependent NGN3 Activation. Cell Reports, 2016, 15, 460-470.	2.9	61
51	Differential Roles of Insulin and IGF-1 Receptors in Adipose Tissue Development and Function. Diabetes, 2016, 65, 2201-2213.	0.3	114
52	Inhibition of TGF-Î² Signaling Promotes Human Pancreatic Î²-Cell Replication. Diabetes, 2016, 65, 1208-1218.	0.3	94
53	ERRÎ³â€"A New Player in Î² Cell Maturation. Cell Metabolism, 2016, 23, 765-767.	7.2	3
54	Nuclear Export of FoxO1 Is Associated with ERK Signaling in Î²-Cells Lacking Insulin Receptors. Journal of Biological Chemistry, 2016, 291, 21485-21495.	1.6	20

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55	IRS1 deficiency protects Î²-cells against ER stress-induced apoptosis by modulating sXBP-1 stability and protein translation. Scientific Reports, 2016, 6, 28177.	1.6	16
56	Is Transforming Stem Cells to Pancreatic Beta Cells Still the Holy Grail for Type 2 Diabetes?. Current Diabetes Reports, 2016, 16, 70.	1.7	13
57	Early Developmental Perturbations in a Human Stem Cell Model of MODY5/HNF1B Pancreatic Hypoplasia. Stem Cell Reports, 2016, 6, 357-367.	2.3	57
58	Harnessing Immune Cells to Enhance Î²-Cell Mass in Type 1 Diabetes. Journal of Investigative Medicine, 2016, 64, 14-20.	0.7	2
59	SerpinB1 Promotes Pancreatic Î² Cell Proliferation. Cell Metabolism, 2016, 23, 194-205.	7.2	177
60	Î²-Cell Glucose Sensitivity Is Linked to Insulin/Glucagon Bihormonal Cells in Nondiabetic Humans. Journal of Clinical Endocrinology and Metabolism, 2016, 101, 470-475.	1.8	34
61	The Hypoglycemic Phenotype Is Islet Cellâ€"Autonomous in Short-Chain Hydroxyacyl-CoA Dehydrogenaseâ€"Deficient Mice. Diabetes, 2016, 65, 1672-1678.	0.3	11
62	Inhibition of DYRK1A Stimulates Human Î²-Cell Proliferation. Diabetes, 2016, 65, 1660-1671.	0.3	157
63	Increased Glucose-induced Secretion of Glucagon-like Peptide-1 in Mice Lacking the Carcinoembryonic Antigen-related Cell Adhesion Molecule 2 (CEACAM2). Journal of Biological Chemistry, 2016, 291, 980-988.	1.6	5
64	Human Î²-Cell Proliferation and Intracellular Signaling: Part 3. Diabetes, 2015, 64, 1872-1885.	0.3	120
65	Preserved DNA Damage Checkpoint Pathway Protects against Complications in Long-Standing Type 1 Diabetes. Cell Metabolism, 2015, 22, 239-252.	7.2	40
66	Dissecting diabetes/metabolic disease mechanisms using pluripotent stem cells and genome editing tools. Molecular Metabolism, 2015, 4, 593-604.	3.0	24
67	Compensatory Islet Response to Insulin Resistance Revealed by Quantitative Proteomics. Journal of Proteome Research, 2015, 14, 3111-3122.	1.8	22
68	High-level Gpr56 expression is dispensable for the maintenance and function of hematopoietic stem and progenitor cells in mice. Stem Cell Research, 2015, 14, 307-322.	0.3	26
69	Cellular stress drives pancreatic plasticity. Science Translational Medicine, 2015, 7, 273ps2.	5.8	11
70	Forced Hepatic Overexpression of CEACAM1 Curtails Diet-Induced Insulin Resistance. Diabetes, 2015, 64, 2780-2790.	0.3	48
71	Excessive Cellular Proliferation Negatively Impacts Reprogramming Efficiency of Human Fibroblasts. Stem Cells Translational Medicine, 2015, 4, 1101-1108.	1.6	11
72	The Polycomb protein, Bmi1, regulates insulin sensitivity. Molecular Metabolism, 2014, 3, 794-802.	3.0	10

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73	Epigenetic modifiers of islet function and mass. Trends in Endocrinology and Metabolism, 2014, 25, 628-636.	3.1	32
74	Insulin Resistance Alters Islet Morphology in Nondiabetic Humans. Diabetes, 2014, 63, 994-1007.	0.3	152
75	Maternal insulin resistance and transient hyperglycemia impact the metabolic and endocrine phenotypes of offspring. American Journal of Physiology - Endocrinology and Metabolism, 2014, 307, E906-E918.	1.8	33
76	GCK-MODY diabetes as a protein misfolding disease: The mutation R275C promotes protein misfolding, self-association and cellular degradation. Molecular and Cellular Endocrinology, 2014, 382, 55-65.	1.6	15
77	Soluble Factors Secreted by T Cells Promote Î²-Cell Proliferation. Diabetes, 2014, 63, 188-202.	0.3	65
78	Insulin regulates carboxypeptidase E by modulating translation initiation scaffolding protein eIF4G1 in pancreatic Î² cells. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2319-28.	3.3	42
79	Comparable Generation of Activin-Induced Definitive Endoderm via Additive Wnt or BMP Signaling in Absence of Serum. Stem Cell Reports, 2014, 3, 5-14.	2.3	47
80	The regulation of pre- and post-maturational plasticity of mammalian islet cell mass. Diabetologia, 2014, 57, 1291-1303.	2.9	37
81	Carboxyl-Ester Lipase Maturity-Onset Diabetes of the Young Is Associated With Development of Pancreatic Cysts and Upregulated MAPK Signaling in Secretin-Stimulated Duodenal Fluid. Diabetes, 2014, 63, 259-269.	0.3	38
82	Palmitate Induces mRNA Translation and Increases ER Protein Load in Islet Î²-Cells via Activation of the Mammalian Target of Rapamycin Pathway. Diabetes, 2014, 63, 3404-3415.	0.3	48
83	New Opportunities: Harnessing Induced Pluripotency for Discovery in Diabetes and Metabolism. Cell Metabolism, 2013, 18, 775-791.	7.2	44
84	Liver-Derived Systemic Factors Drive Î² Cell Hyperplasia in Insulin-Resistant States. Cell Reports, 2013, 3, 401-410.	2.9	123
85	Derivation of Human Induced Pluripotent Stem Cells from Patients with Maturity Onset Diabetes of the Young*. Journal of Biological Chemistry, 2013, 288, 5353-5356.	1.6	102
86	X-Box Binding Protein 1 Is Essential for Insulin Regulation of Pancreatic Î±-Cell Function. Diabetes, 2013, 62, 2439-2449.	0.3	54
87	Absence of Diabetes and Pancreatic Exocrine Dysfunction in a Transgenic Model of Carboxyl-Ester Lipase-MODY (Maturity-Onset Diabetes of the Young). PLoS ONE, 2013, 8, e60229.	1.1	20
88	Human Î²-Cell Proliferation and Intracellular Signaling. Diabetes, 2012, 61, 2205-2213.	0.3	208
89	Insulin Augmentation of Glucose-Stimulated Insulin Secretion Is Impaired in Insulin-Resistant Humans. Diabetes, 2012, 61, 301-309.	0.3	54
90	Identifying Biomarkers of Subclinical Diabetes. Diabetes, 2012, 61, 1925-1926.	0.3	7

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91	Exogenous Insulin Enhances Glucose-Stimulated Insulin Response in Healthy Humans Independent of Changes in Free Fatty Acids. Journal of Clinical Endocrinology and Metabolism, 2011, 96, 3811-3821.	1.8	24
92	Cyclin D2 Is Essential for the Compensatory Î²-Cell Hyperplastic Response to Insulin Resistance in Rodents. Diabetes, 2010, 59, 987-996.	0.3	60
93	Insulin enhances glucose-stimulated insulin secretion in healthy humans. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 4770-4775.	3.3	79
94	GIP: No Longer the Neglected Incretin Twin?. Science Translational Medicine, 2010, 2, 49ps47.	5.8	14
95	Uncoupling Modifier Genes from Uncoupling Protein 2 in Pancreatic Î²-Cells. Endocrinology, 2009, 150, 2994-2996.	1.4	1
96	Glucose Effects on Beta-Cell Growth and Survival Require Activation of Insulin Receptors and Insulin Receptor Substrate 2. Molecular and Cellular Biology, 2009, 29, 3219-3228.	1.1	138
97	Insulin Signaling in Î± Cells Modulates Glucagon Secretion In Vivo. Cell Metabolism, 2009, 9, 350-361.	7.2	271
98	Insulin Signaling Regulates Mitochondrial Function in Pancreatic Î²-Cells. PLoS ONE, 2009, 4, e7983.	1.1	57
99	Insulin receptors in beta-cells are critical for islet compensatory growth response to insulin resistance. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 8977-8982.	3.3	260
100	Ephs and Ephrins Keep Pancreatic Î² Cells Connected. Cell, 2007, 129, 241-243.	13.5	9
101	New Insights into the Roles of Insulin/IGF-I in the Development and Maintenance of Î²-Cell Mass. Reviews in Endocrine and Metabolic Disorders, 2005, 6, 199-210.	2.6	83
102	Loss of ARNT/HIF1Î² Mediates Altered Gene Expression and Pancreatic-Islet Dysfunction in Human Type 2 Diabetes. Cell, 2005, 122, 337-349.	13.5	460
103	MOLECULAR BIOLOGY: HNFs--Linking the Liver and Pancreatic Islets in Diabetes. Science, 2004, 303, 1311-1312.	6.0	44
104	Islet Secretory Defect in Insulin Receptor Substrate 1 Null Mice Is Linked With Reduced Calcium Signaling and Expression of Sarco(endo)plasmic Reticulum Ca2+-ATPase (SERCA)-2b and -3. Diabetes, 2004, 53, 1517-1525.	0.3	86
105	The islet Î²-cell. International Journal of Biochemistry and Cell Biology, 2004, 36, 365-371.	1.2	63
106	PDX-1 haploinsufficiency limits the compensatory islet hyperplasia that occurs in response to insulin resistance. Journal of Clinical Investigation, 2004, 114, 828-836.	3.9	236
107	Receptors for insulin and insulin-like growth factor-1 and insulin receptor substrate-1 mediate pathways that regulate islet function. Biochemical Society Transactions, 2002, 30, 317-322.	1.6	87
108	Î²-cellâ€“specific deletion of the Igf1 receptor leads to hyperinsulinemia and glucose intolerance but does not alter Î²-cell mass. Nature Genetics, 2002, 31, 111-115.	9.4	345

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109	Tissue-Specific Targeting of the Insulin Receptor Gene. Endocrine, 2002, 19, 257-266.	2.2	6
110	Roles of Insulin Receptor Substrate-1, Phosphatidylinositol 3-Kinase, and Release of Intracellular Ca2+ Stores in Insulin-stimulated Insulin Secretion in Î²-Cells. Journal of Biological Chemistry, 2000, 275, 22331-22338.	1.6	149
111	Loss of Insulin Signaling in Hepatocytes Leads to Severe Insulin Resistance and Progressive Hepatic Dysfunction. Molecular Cell, 2000, 6, 87-97.	4.5	1,077
112	Tissue-Specific Knockout of the Insulin Receptor in Pancreatic Î² Cells Creates an Insulin Secretory Defect Similar to that in Type 2 Diabetes. Cell, 1999, 96, 329-339.	13.5	1,093
113	Altered function of insulin receptor substrate-1â€"deficient mouse islets and cultured Î²-cell lines. Journal of Clinical Investigation, 1999, 104, R69-R75.	3.9	246