Timo Otonkoski

List of Publications by Year
in descending order

76 papers	6,465 citations	101543 36 h-index	71685 76 g-index
88 all docs	88 docs citations	88 times ranked	9543 citing authors

#	Article	IF	Citations
1	⁶⁸Ga-NODAGA-Exendin-4 PET/CT Improves the Detection of Focal Congenital Hyperinsulinism. Journal of Nuclear Medicine, 2022, 63, 310-315.	5.0	19
2	CRISPR activation enables high-fidelity reprogramming into human pluripotent stem cells. Stem Cell Reports, 2022, 17, 413-426.	4.8	13
3	PTPN2 Regulates the Interferon Signaling and Endoplasmic Reticulum Stress Response in Pancreatic Î²-Cells in Autoimmune Diabetes. Diabetes, 2022, 71, 653-668.	0.6	8
4	Metabolic determination of cell fate through selective inheritance of mitochondria. Nature Cell Biology, 2022, 24, 148-154.	10.3	46
5	Stem Cell Based Models in Congenital Hyperinsulinism â€“ Perspective on Practicalities and Possibilities. Frontiers in Endocrinology, 2022, 13, 837450.	3.5	2
6	Maturation of beta cells: lessons from in vivo and in vitro models. Diabetologia, 2022, 65, 917-930.	6.3	21
7	Functional, metabolic and transcriptional maturation of human pancreatic islets derived from stem cells. Nature Biotechnology, 2022, 40, 1042-1055.	17.5	135
8	DUX4 is a multifunctional factor priming human embryonic genome activation. IScience, 2022, 25, 104137.	4.1	20
9	Loss of MANF Causes Childhood-Onset Syndromic Diabetes Due to Increased Endoplasmic Reticulum Stress. Diabetes, 2021, 70, 1006-1018.	0.6	37
10	SUR1-mutant iPS cell-derived islets recapitulate the pathophysiology of congenital hyperinsulinism. Diabetologia, 2021, 64, 630-640.	6.3	25
11	Long-Term Outcome and Treatment in Persistent and Transient Congenital Hyperinsulinism: A Finnish Population-Based Study. Journal of Clinical Endocrinology and Metabolism, 2021, 106, 1542-1551.	3.6	14
12	Simultaneous high-efficiency base editing and reprogramming of patient fibroblasts. Stem Cell Reports, 2021, 16, 3064-3075.	4.8	8
13	Kaposiâ€™s Sarcoma-Associated Herpesvirus Reactivation by Targeting of a dCas9-Based Transcription Activator to the ORF50 Promoter. Viruses, 2020, 12, 952.	3.3	3
14	Clinical and Genetic Characterization of 153 Patients with Persistent or Transient Congenital Hyperinsulinism. Journal of Clinical Endocrinology and Metabolism, 2020, 105, e1686-e1694.	3.6	11
15	ALS and Parkinson's disease genes CHCHD10 and CHCHD2 modify synaptic transcriptomes in human iPSC-derived motor neurons. Neurobiology of Disease, 2020, 141, 104940.	4.4	24
16	YIPF5 mutations cause neonatal diabetes and microcephaly through endoplasmic reticulum stress. Journal of Clinical Investigation, 2020, 130, 6338-6353.	8.2	58
17	Early Detection of Peripheral Blood Cell Signature in Children Developing Î²-Cell Autoimmunity at a Young Age. Diabetes, 2019, 68, 2024-2034.	0.6	37
18	Loss of ZnT8 function protects against diabetes by enhanced insulin secretion. Nature Genetics, 2019, 51, 1596-1606.	21.4	96

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19	Genome editing of human pancreatic beta cell models: problems, possibilities and outlook. Diabetologia, 2019, 62, 1329-1336.	6.3	20
20	Pharmacological reactivation of MYC-dependent apoptosis induces susceptibility to anti-PD-1 immunotherapy. Nature Communications, 2019, 10, 620.	12.8	60
21	Characterization of neural crest-derived stem cells isolated from human bone marrow for improvement of transplanted islet function. Upsala Journal of Medical Sciences, 2019, 124, 228-237.	0.9	5
22	MANF Is Required for the Postnatal Expansion and Maintenance of Pancreatic Î²-Cell Mass in Mice. Diabetes, 2019, 68, 66-80.	0.6	50
23	Concise Review: Human Pluripotent Stem Cells for the Modeling of Pancreatic Î²-Cell Pathology. Stem Cells, 2019, 37, 33-41.	3.2	45
24	Pancreatic Î²-cell tRNA hypomethylation and fragmentation link TRMT10A deficiency with diabetes. Nucleic Acids Research, 2018, 46, 10302-10318.	14.5	93
25	MANF protects human pancreatic beta cells against stress-induced cell death. Diabetologia, 2018, 61, 2202-2214.	6.3	66
26	Human pluripotent reprogramming with CRISPR activators. Nature Communications, 2018, 9, 2643.	12.8	128
27	Insulin mutations impair beta-cell development in a patient-derived iPSC model of neonatal diabetes. ELife, 2018, 7, .	6.0	114
28	An Activating STAT3 Mutation Causes Neonatal Diabetes through Premature Induction of Pancreatic Differentiation. Cell Reports, 2017, 19, 281-294.	6.4	94
29	Generation of a SOX2 reporter human induced pluripotent stem cell line using CRISPR/SaCas9. Stem Cell Research, 2017, 22, 16-19.	0.7	11
30	p73 is required for appropriate BMP-induced mesenchymal-to-epithelial transition during somatic cell reprogramming. Cell Death and Disease, 2017, 8, e3034-e3034.	6.3	16
31	Generation of an OCT4 reporter human induced pluripotent stem cell line using CRISPR/SpCas9. Stem Cell Research, 2017, 23, 105-108.	0.7	4
32	A Strong Contractile Actin Fence and Large Adhesions Direct Human Pluripotent Colony Morphology and Adhesion. Stem Cell Reports, 2017, 9, 67-76.	4.8	59
33	sept7b is required for the differentiation of pancreatic endocrine progenitors. Scientific Reports, 2016, 6, 24992.	3.3	5
34	New tools for experimental diabetes research: Cellular reprogramming and genome editing. Upsala Journal of Medical Sciences, 2016, 121, 146-150.	0.9	3
35	Regulation of Human Pluripotent Stem Cell-Derived Hepatic Cell Phenotype by Three-Dimensional Hydrogel Models. Tissue Engineering - Part A, 2016, 22, 971-984.	3.1	20
36	Clinical, Genetic, and Biochemical Characteristics of Early-Onset Diabetes in the Finnish Population. Journal of Clinical Endocrinology and Metabolism, 2016, 101, 3018-3026.	3.6	28

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37	Genetic Variability Overrides the Impact of Parental Cell Type and Determines iPSC Differentiation Potential. Stem Cell Reports, 2016, 6, 200-212.	4.8	211
38	Autoimmunity, hypogammaglobulinemia, lymphoproliferation, and mycobacterial disease in patients with activating mutations in STAT3. Blood, 2015, 125, 639-648.	1.4	229
39	Early-Onset Diabetic E1-DN Mice Develop Albuminuria and Glomerular Injury Typical of Diabetic Nephropathy. BioMed Research International, 2015, 2015, 1-11.	1.9	10
40	Generation of iPSC line HEL47.2 from healthy human adult fibroblasts. Stem Cell Research, 2015, 15, 263-265.	0.7	14
41	mtDNA Mutagenesis Disrupts Pluripotent Stem Cell Function by Altering Redox Signaling. Cell Reports, 2015, 11, 1614-1624.	6.4	66
42	Human pluripotent stem cell based islet models for diabetes research. Best Practice and Research in Clinical Endocrinology and Metabolism, 2015, 29, 899-909.	4.7	25
43	Conditionally Stabilized dCas9 Activator for Controlling Gene Expression in Human Cell Reprogramming and Differentiation. Stem Cell Reports, 2015, 5, 448-459.	4.8	158
44	Generation of iPSC line HEL24.3 from human neonatal foreskin fibroblasts. Stem Cell Research, 2015, 15, 266-268.	0.7	38
45	Combined negative effect of donor age and time in culture on the reprogramming efficiency into induced pluripotent stem cells. Stem Cell Research, 2015, 15, 254-262.	0.7	64
46	Patient-Specific Induced Pluripotent Stem Cellâ€"Derived RPE Cells: Understanding the Pathogenesis of Retinopathy in Long-Chain 3-Hydroxyacyl-CoA Dehydrogenase Deficiency. , 2015, 56, 3371.		29
47	Selective MicroRNA-Offset RNA Expression in Human Embryonic Stem Cells. PLoS ONE, 2015, 10, e0116668.	2.5	25
48	Intestinal Commitment and Maturation of Human Pluripotent Stem Cells Is Independent of Exogenous FGF4 and R-spondin1. PLoS ONE, 2015, 10, e0134551.	2.5	23
49	Integrative genomics and transcriptomics analysis of human embryonic and induced pluripotent stem cells. BioData Mining, 2014, 7, 32.	4.0	2
50	Advanced Feeder-Free Generation of Induced Pluripotent Stem Cells Directly From Blood Cells. Stem Cells Translational Medicine, 2014, 3, 1402-1409.	3.3	31
51	Activating germline mutations in STAT3 cause early-onset multi-organ autoimmune disease. Nature Genetics, 2014, 46, 812-814.	21.4	411
52	MANF Is Indispensable for the Proliferation and Survival of Pancreatic Î² Cells. Cell Reports, 2014, 7, 366-375.	6.4	161
53	EGFR Signaling Promotes Î²-Cell Proliferation and Survivin Expression during Pregnancy. PLoS ONE, 2014, 9, e93651.	2.5	30
54	Activin A and Wnt-dependent specification of human definitive endoderm cells. Experimental Cell Research, 2013, 319, 2535-2544.	2.6	60

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55	Small Molecule Inhibitors Promote Efficient Generation of Induced Pluripotent Stem Cells From Human Skeletal Myoblasts. Stem Cells and Development, 2013, 22, 114-123.	2.1	40
56	Comparative Analysis of Targeted Differentiation of Human Induced Pluripotent Stem Cells (hiPSCs) and Human Embryonic Stem Cells Reveals Variability Associated With Incomplete Transgene Silencing in Retrovirally Derived hiPSC Lines. Stem Cells Translational Medicine, 2013, 2, 83-93.	3.3	64
57	A Novel Feeder-Free Culture System for Human Pluripotent Stem Cell Culture and Induced Pluripotent Stem Cell Derivation. PLoS ONE, 2013, 8, e76205.	2.5	28
58	A Mouse Model of Human Hyperinsulinism Produced by the E1506K Mutation in the Sulphonylurea Receptor SUR1. Diabetes, 2013, 62, 3797-3806.	0.6	28
59	Exercise-Induced Hyperinsulinism: A Failure of Monocarboxylate Transporter 1 Expression Silencing. Frontiers in Diabetes, 2012, , 172-181.	0.4	1
60	Copy number variation and selection during reprogramming to pluripotency. Nature, 2011, 471, 58-62.	27.8	870
61	In vitro insulin secretion by pancreatic tissue from infants with diazoxide-resistant congenital hyperinsulinism deviates from model predictions. Journal of Clinical Investigation, 2011, 121, 3932-3942.	8.2	44
62	IL-17 Immunity in Human Type 1 Diabetes. Journal of Immunology, 2010, 185, 1959-1967.	0.8	255
63	Weighing up Î²-cell mass in mice and humans: Self-renewal, progenitors or stem cells?. Molecular and Cellular Endocrinology, 2008, 288, 79-85.	3.2	39
64	Physical Exerciseâ€"Induced Hypoglycemia Caused by Failed Silencing of Monocarboxylate Transporter 1 in Pancreatic Î² Cells. American Journal of Human Genetics, 2007, 81, 467-474.	6.2	213
65	Characterization of human embryonic stem cell lines by the International Stem Cell Initiative. Nature Biotechnology, 2007, 25, 803-816.	17.5	983
66	Distinct differentiation characteristics of individual human embryonic stem cell lines. BMC Developmental Biology, 2006, 6, 40.	2.1	65
67	Downregulation of EGF Receptor Signaling in Pancreatic Islets Causes Diabetes Due to Impaired Postnatal Â-Cell Growth. Diabetes, 2006, 55, 3299-3308.	0.6	82
68	Noninvasive diagnosis of focal hyperinsulinism of infancy with [18F]-DOPA positron emission tomography. Diabetes, 2006, 55, 13-8.	0.6	76
69	Stem cells in the treatment of diabetes. Annals of Medicine, 2005, 37, 513-520.	3.8	24
70	Physical Exercise-Induced Hyperinsulinemic Hypoglycemia Is an Autosomal-Dominant Trait Characterized by Abnormal Pyruvate-Induced Insulin Release. Diabetes, 2003, 52, 199-204.	0.6	135
71	Characterization of Endocrine Progenitor Cells and Critical Factors for Their Differentiation in Human Adult Pancreatic Cell Culture. Diabetes, 2003, 52, 2007-2015.	0.6	227
72	ErbB Signaling Regulates Lineage Determination of Developing Pancreatic Islet Cells in Embryonic Organ Culture. Endocrinology, 2002, 143, 4437-4446.	2.8	78

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73	Screening enteroviruses for Î²-cell tropism using foetal porcine Î²-cells. Journal of General Virology, 2001, 82, 1909-1916.	2.9	10
74	Growth Factor-Mediated Proliferation and Differentiation of Insulin-Producing INS-1 and RINm5F Cells: Identification of Betacellulin as a Novel Î²-Cell Mitogen*. Endocrinology, 1998, 139, 1494-1499.	2.8	112
75	EGF- and TGF-Î±-Like Peptides in Human Fetal Gut. Pediatric Research, 1989, 26, 25-30.	2.3	47
76	Insulin and Glucagon Secretory Responses to Arginine, Glue agon, and Theophylline During Perifusion of Human Fetal Islet-Like Cell Clusters*. Journal of Clinical Endocrinology and Metabolism, 1988, 67, 734-740.	3.6	19