Michele Solimena

List of Publications by Year in Descending Order

116 papers	7,082 citations	39 h-index	83 g-index
127 ext. papers	8,238 ext. citations	11 avg, IF	5.24 L-index

#	Paper	IF	Citations
116	Metabolic implications of pancreatic fat accumulation. *Nature Reviews Endocrinology*, **2022**, 18, 43-54	15.2	2
115	The German Gestational Diabetes Study (PREG), a prospective multicentre cohort study: rationale, methodology and design.. *BMJ Open*, **2022**, 12, e058268	3	0
114	PTBP1 promotes hematopoietic stem cell maintenance and red blood cell development by ensuring sufficient availability of ribosomal constituents.. *Cell Reports*, **2022**, 39, 110793	10.6	2
113	An open-access volume electron microscopy atlas of whole cells and tissues. *Nature*, **2021**, 599, 147-151	50.4	12
112	Plasma triacylglycerols are biomarkers of β-cell function in mice and humans. *Molecular Metabolism*, **2021**, 54, 101355	8.8	1
111	3D FIB-SEM reconstruction of microtubule-organelle interaction in whole primary mouse β cells. *Journal of Cell Biology*, **2021**, 220,	7.3	20
110	Schutz und Regeneration der Betazellen. *Diabetes Aktuell*, **2021**, 19, 86-89	0	
109	Viral infiltration of pancreatic islets in patients with COVID-19. *Nature Communications*, **2021**, 12, 3534	17.4	34
108	Multi-omics profiling of living human pancreatic islet donors reveals heterogeneous beta cell trajectories towards type 2 diabetes. *Nature Metabolism*, **2021**, 3, 1017-1031	14.6	13
107	Melatonin promotes regeneration of injured motor axons via MT receptors. *Journal of Pineal Research*, **2021**, 70, e12695	10.4	6
106	miR-375- and miR-1-Regulated Coxsackievirus B3 Has No Pancreas and Heart Toxicity But Strong Antitumor Efficiency in Colorectal Carcinomas. *Human Gene Therapy*, **2021**, 32, 216-230	4.8	7
105	Chromatin 3D interaction analysis of the STARD10 locus unveils FCHSD2 as a regulator of insulin secretion. *Cell Reports*, **2021**, 34, 108703	10.6	1
104	Sequential in vivo labeling of insulin secretory granule pools in - transgenic pigs. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	4
103	The type 2 diabetes gene product STARD10 is a phosphoinositide-binding protein that controls insulin secretory granule biogenesis. *Molecular Metabolism*, **2020**, 40, 101015	8.8	10
102	Dysfunction of Persisting β Cells Is a Key Feature of Early Type 2 Diabetes Pathogenesis. *Cell Reports*, **2020**, 31, 107469	10.6	42
101	MiR-132 controls pancreatic beta cell proliferation and survival through Pten/Akt/Foxo3 signaling. *Molecular Metabolism*, **2020**, 31, 150-162	8.8	23
100	Circadian, Sleep and Caloric Intake Phenotyping in Type 2 Diabetes Patients With Rare Melatonin Receptor 2 Mutations and Controls: A Pilot Study. *Frontiers in Physiology*, **2020**, 11, 564140	4.6	5

99	Persistent or Transient Human β Cell Dysfunction Induced by Metabolic Stress: Specific Signatures and Shared Gene Expression with Type 2 Diabetes. *Cell Reports*, **2020**, 33, 108466	10.6	22
98	The making of insulin in health and disease. *Diabetologia*, **2020**, 63, 1981-1989	10.3	17
97	MiR-375-mediated suppression of engineered coxsackievirus B3 in pancreatic cells. *FEBS Letters*, **2020**, 594, 763-775	3.8	5
96	Development of a new mouse model for coxsackievirus-induced myocarditis by attenuating coxsackievirus B3 virulence in the pancreas. *Cardiovascular Research*, **2020**, 116, 1756-1766	9.9	8
95	Metabolically phenotyped pancreatectomized patients as living donors for the study of islets in health and diabetes. *Molecular Metabolism*, **2019**, 27S, S1-S6	8.8	5
94	deletion causes extensive vacuolation that consumes the insulin content of pancreatic β cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 19983-19988	11.5	12
93	ICA512 RESP18 homology domain is a protein-condensing factor and insulin fibrillation inhibitor. *Journal of Biological Chemistry*, **2019**, 294, 8564-8576	5.4	4
92	Laser capture microdissection of human pancreatic islets reveals novel eQTLs associated with type 2 diabetes. *Molecular Metabolism*, **2019**, 24, 98-107	8.8	14
91	Fostering improved human islet research: a European perspective. *Diabetologia*, **2019**, 62, 1514-1516	10.3	9
90	Detection of recombinant and endogenous mouse melatonin receptors by monoclonal antibodies targeting the C-terminal domain. *Journal of Pineal Research*, **2019**, 66, e12540	10.4	10
89	The RNA-binding protein PTBP1 is necessary for B cell selection in germinal centers. *Nature Immunology*, **2018**, 19, 267-278	19.1	33
88	Virus-like infection induces human β cell dedifferentiation. *JCI Insight*, **2018**, 3,	9.9	32
87	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	10.3	84
86	Content-aware image restoration: pushing the limits of fluorescence microscopy. *Nature Methods*, **2018**, 15, 1090-1097	21.6	369
85	The Expression of Aldolase B in Islets Is Negatively Associated With Insulin Secretion in Humans. *Journal of Clinical Endocrinology and Metabolism*, **2018**, 103, 4373-4383	5.6	24
84	Decreased STARD10 Expression Is Associated with Defective Insulin Secretion in Humans and Mice. *American Journal of Human Genetics*, **2017**, 100, 238-256	11	50
83	Vessel Network Architecture of Adult Human Islets Promotes Distinct Cell-Cell Interactions In Situ and Is Altered After Transplantation. *Endocrinology*, **2017**, 158, 1373-1385	4.8	42
82	A 4D view on insulin secretory granule turnover in the β cell. *Diabetes, Obesity and Metabolism*, **2017**, 19 Suppl 1, 107-114	6.7	16

81	Favorable outcome of experimental islet xenotransplantation without immunosuppression in a nonhuman primate model of diabetes. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 11745-11750	11.5	56
80	A Global Approach for Quantitative Super Resolution and Electron Microscopy on Cryo and Epoxy Sections Using Self-labeling Protein Tags. *Scientific Reports*, **2017**, 7, 23	4.9	29
79	The F-actin modifier villin regulates insulin granule dynamics and exocytosis downstream of islet cell autoantigen 512. *Molecular Metabolism*, **2016**, 5, 656-668	8.8	14
78	Aldehyde dehydrogenase activity is necessary for beta cell development and functionality in mice. *Diabetologia*, **2016**, 59, 139-150	10.3	9
77	Biochemical, biophysical, and functional properties of ICA512/IA-2 RESP18 homology domain. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2016**, 1864, 511-22	4	4
76	X-ray structure of the mature ectodomain of phogrin. *Journal of Structural and Functional Genomics*, **2015**, 16, 1-9		4
75	Mechanisms of Beta Cell Dysfunction Associated With Viral Infection. *Current Diabetes Reports*, **2015**, 15, 73	5.6	33
74	A Spatial Model of Insulin-Granule Dynamics in Pancreatic □Cells. *Traffic*, **2015**, 16, 797-813	5.7	13
73	A human beta cell line with drug inducible excision of immortalizing transgenes. *Molecular Metabolism*, **2015**, 4, 916-25	8.8	47
72	Blood Glucose Homeostasis in the Course of Partial Pancreatectomy--Evidence for Surgically Reversible Diabetes Induced by Cholestasis. *PLoS ONE*, **2015**, 10, e0134140	3.7	10
71	Stability of proICA512/IA-2 and its targeting to insulin secretory granules require □-sheet-mediated dimerization of its ectodomain in the endoplasmic reticulum. *Molecular and Cellular Biology*, **2015**, 35, 914-27	4.8	7
70	Aged insulin granules display reduced microtubule-dependent mobility and are disposed within actin-positive multigranular bodies. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, E667-76	11.5	40
69	Adaptive lipid packing and bioactivity in membrane domains. *PLoS ONE*, **2015**, 10, e0123930	3.7	70
68	Using pancreas tissue slices for in situ studies of islet of Langerhans and acinar cell biology. *Nature Protocols*, **2014**, 9, 2809-22	18.8	68
67	PTBP1 is required for glucose-stimulated cap-independent translation of insulin granule proteins and Coxsackieviruses in beta cells. *Molecular Metabolism*, **2014**, 3, 518-30	8.8	27
66	Regulation of □cell function by RNA-binding proteins. *Molecular Metabolism*, **2013**, 2, 348-55	8.8	16
65	Transplantation of human islets without immunosuppression. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 19054-8	11.5	210
64	Age-dependent labeling and imaging of insulin secretory granules. *Diabetes*, **2013**, 62, 3687-96	0.9	44

63	Effects of immunosuppression on alpha and beta cell renewal in transplanted mouse islets. *Diabetologia*, **2013**, 56, 1596-604	10.3	7
62	The complement anaphylatoxin C5a receptor contributes to obese adipose tissue inflammation and insulin resistance. *Journal of Immunology*, **2013**, 191, 4367-74	5.3	66
61	Improved protocol for laser microdissection of human pancreatic islets from surgical specimens. *Journal of Visualized Experiments*, **2013**,	1.6	15
60	Novel standards in the measurement of rat insulin granules combining electron microscopy, high-content image analysis and in silico modelling. *Diabetologia*, **2012**, 55, 1013-23	10.3	49
59	Cholesterol-enriched membrane rafts and insulin secretion. *Journal of Diabetes Investigation*, **2012**, 3, 339-46	3.9	15
58	Polymorphism rs11085226 in the gene encoding polypyrimidine tract-binding protein 1 negatively affects glucose-stimulated insulin secretion. *PLoS ONE*, **2012**, 7, e46154	3.7	5
57	Sequence variation in promoter of Ica1 gene, which encodes protein implicated in type 1 diabetes, causes transcription factor autoimmune regulator (AIRE) to increase its binding and down-regulate expression. *Journal of Biological Chemistry*, **2012**, 287, 17882-17893	5.4	12
56	CDK5 regulatory subunit-associated protein 1-like 1 (CDKAL1) is a tail-anchored protein in the endoplasmic reticulum (ER) of insulinoma cells. *Journal of Biological Chemistry*, **2012**, 287, 41808-19	5.4	25
55	Isolation of human islets from partially pancreatectomized patients. *Journal of Visualized Experiments*, **2011**,	1.6	4
54	PTBP1 is required for embryonic development before gastrulation. *PLoS ONE*, **2011**, 6, e16992	3.7	33
53	Protein-protein interactions in crystals of the human receptor-type protein tyrosine phosphatase ICA512 ectodomain. *PLoS ONE*, **2011**, 6, e24191	3.7	3
52	Functional assessment of automatically sorted pancreatic islets using large particle flow cytometry. *Islets*, **2011**, 3, 267-70	2	8
51	Human stiff-person syndrome IgG induces anxious behavior in rats. *PLoS ONE*, **2011**, 6, e16775	3.7	42
50	β-Syntrophin is a Cdk5 substrate that restrains the motility of insulin secretory granules. *PLoS ONE*, **2010**, 5, e12929	3.7	32
49	Impaired insulin turnover in islets from type 2 diabetic patients. *Islets*, **2010**, 2, 30-6	2	15
48	Automated suppression of sample-related artifacts in Fluorescence Correlation Spectroscopy. *Optics Express*, **2010**, 18, 11073-82	3.3	19
47	Insulin release: shedding light on a complex matter. *Cell Metabolism*, **2010**, 12, 5-6	24.6	2
46	The insulin secretory granule as a signaling hub. *Trends in Endocrinology and Metabolism*, **2010**, 21, 599-609	8.8	125

45	Tamoxifen-independent recombination in the RIP-CreER mouse. *PLoS ONE*, **2010**, 5, e13533	3.7	43
44	Rapid changes of mRNA-binding protein levels following glucose and 3-isobutyl-1-methylxanthine stimulation of insulinoma INS-1 cells. *Molecular and Cellular Proteomics*, **2009**, 8, 393-408	7.6	11
43	beta-Cells at the crossroads: choosing between insulin granule production and proliferation. *Diabetes, Obesity and Metabolism*, **2009**, 11 Suppl 4, 54-64	6.7	16
42	ICA69 is a novel Rab2 effector regulating ER-Golgi trafficking in insulinoma cells. *European Journal of Cell Biology*, **2008**, 87, 197-209	6.1	35
41	ICA512 signaling enhances pancreatic beta-cell proliferation by regulating cyclins D through STATs. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 674-9	11.5	47
40	Regulation of insulin granule turnover in pancreatic beta-cells by cleaved ICA512. *Journal of Biological Chemistry*, **2008**, 283, 33719-29	5.4	29
39	Pancreas islets in metabolic signaling--focus on the beta-cell. *Frontiers in Bioscience - Landmark*, **2008**, 13, 7156-71	2.8	64
38	Biogenesis of secretory granules. *Current Opinion in Cell Biology*, **2006**, 18, 365-70	9	69
37	cAMP-dependent phosphorylation of PTB1 promotes the expression of insulin secretory granule proteins in beta cells. *Cell Metabolism*, **2006**, 3, 123-34	24.6	68
36	Synergy of glucose and growth hormone signalling in islet cells through ICA512 and STAT5. *Nature Cell Biology*, **2006**, 8, 435-45	23.4	64
35	Effect of oxygenated perfluorocarbons on isolated rat pancreatic islets in culture. *Cell Transplantation*, **2005**, 14, 441-8	4	17
34	An enzymatic cascade of Rab5 effectors regulates phosphoinositide turnover in the endocytic pathway. *Journal of Cell Biology*, **2005**, 170, 607-18	7.3	309
33	BetaIVSigma1 spectrin stabilizes the nodes of Ranvier and axon initial segments. *Journal of Cell Biology*, **2004**, 166, 983-90	7.3	113
32	Nuclear translocation of an ICA512 cytosolic fragment couples granule exocytosis and insulin expression in {beta}-cells. *Journal of Cell Biology*, **2004**, 167, 1063-74	7.3	61
31	BetaIV spectrins are essential for membrane stability and the molecular organization of nodes of Ranvier. *Journal of Neuroscience*, **2004**, 24, 7230-40	6.6	114
30	Polypyrimidine tract-binding protein promotes insulin secretory granule biogenesis. *Nature Cell Biology*, **2004**, 6, 207-14	23.4	137
29	Islet cell autoantigen of 69 kDa is an arfaptin-related protein associated with the Golgi complex of insulinoma INS-1 cells. *Journal of Biological Chemistry*, **2003**, 278, 26166-73	5.4	27
28	Secretory granules: and the last shall be first. *Trends in Cell Biology*, **2003**, 13, 399-402	18.3	15

27	The receptor tyrosine phosphatase-like protein ICA512 binds the PDZ domains of beta2-syntrophin and nNOS in pancreatic beta-cells. *European Journal of Cell Biology*, **2000**, 79, 621-30	6.1	55
26	betaIV spectrin, a new spectrin localized at axon initial segments and nodes of ranvier in the central and peripheral nervous system. *Journal of Cell Biology*, **2000**, 151, 985-1002	7.3	229
25	Synaptic autoimmunity and the Salk factor. *Neuron*, **2000**, 28, 309-10	13.9	1
24	Autoimmunity to gephyrin in Stiff-Man syndrome. *Neuron*, **2000**, 26, 307-12	13.9	170
23	Post-translational modifications of ICA512, a receptor tyrosine phosphatase-like protein of secretory granules. *European Journal of Neuroscience*, **1999**, 11, 2609-20	3.5	37
22	Molecular dissection of regulated secretory pathways in human gastric enterochromaffin-like cells: an immunohistochemical analysis. *Histochemistry and Cell Biology*, **1999**, 112, 205-14	2.4	15
21	Vesicular autoantigens of type 1 diabetes. *Diabetes/metabolism Reviews*, **1998**, 14, 227-40		18
20	MFR, a putative receptor mediating the fusion of macrophages. *Molecular and Cellular Biology*, **1998**, 18, 6213-23	4.8	133
19	STEP61: a member of a family of brain-enriched PTPs is localized to the endoplasmic reticulum. *Journal of Neuroscience*, **1996**, 16, 7821-31	6.6	71
18	Coxsackieviruses and diabetes. *Nature Medicine*, **1995**, 1, 25-6	50.5	23
17	Targeting of the 67-kDa isoform of glutamic acid decarboxylase to intracellular organelles is mediated by its interaction with the NH2-terminal region of the 65-kDa isoform of glutamic acid decarboxylase. *Journal of Biological Chemistry*, **1995**, 270, 2241-6	5.4	67
16	Autoimmunity in stiff-Man syndrome with breast cancer is targeted to the C-terminal region of human amphiphysin, a protein similar to the yeast proteins, Rvs167 and Rvs161. *FEBS Letters*, **1994**, 351, 73-9	3.8	128
15	Genetics of susceptibility and resistance to insulin-dependent diabetes in stiff-man syndrome. *Lancet, The*, **1994**, 344, 1027-8	40	20
14	GAD, diabetes, and Stiff-Man syndrome: some progress and more questions. *Journal of Endocrinological Investigation*, **1994**, 17, 509-20	5.2	28
13	Autoantibodies to a 128-kd synaptic protein in three women with the stiff-man syndrome and breast cancer. *New England Journal of Medicine*, **1993**, 328, 546-51	59.2	293
12	Sudden death and paroxysmal autonomic dysfunction in stiff-man syndrome. *Journal of Neurology*, **1991**, 238, 91-6	5.5	94
11	Autoimmunity to glutamic acid decarboxylase (GAD) in Stiff-Man syndrome and insulin-dependent diabetes mellitus. *Trends in Neurosciences*, **1991**, 14, 452-7	13.3	159
10	Identification of the 64K autoantigen in insulin-dependent diabetes as the GABA-synthesizing enzyme glutamic acid decarboxylase. *Nature*, **1990**, 347, 151-6	50.4	1507

9	Autoantibodies to GABA-ergic neurons and pancreatic beta cells in stiff-man syndrome. *New England Journal of Medicine*, **1990**, 322, 1555-60	59.2	622
8	3D FIB-SEM reconstruction of microtubule-organelle interaction in whole primary mouse beta cells		1
7	An open-access volume electron microscopy atlas of whole cells and tissues		3
6	miR-132 controls pancreatic beta cell proliferation and survival in mouse model through the Pten/Akt/Foxo3 signaling		1
5	FLIM-based pH measurements reveal incretin-induced rejuvenation of aged insulin secretory granules		5
4	Chromatin 3D interaction analysis of the STARD10 locus unveils FCHSD2 as a new regulator of insulin secretion		2
3	Purification of age-distinct insulin secretory granules through antigen restriction using the CLIP-tag		1
2	Content-Aware Image Restoration: Pushing the Limits of Fluorescence Microscopy		13
1	Sequential in vivo labeling of insulin secretory granule pools in INS-SNAP transgenic pigs		1