Michele Solimena

List of Publications by Year
in descending order

113 papers	9,211 citations	57631 44 h-index	42291 92 g-index
127 all docs	127 docs citations	127 times ranked	10161 citing authors

#	Article	IF	Citations
1	Metabolic implications of pancreatic fat accumulation. Nature Reviews Endocrinology, 2022, 18, 43-54.	4.3	46
2	The Impact of Pancreatic Head Resection on Blood Glucose Homeostasis in Patients with Chronic Pancreatitis. Journal of Clinical Medicine, 2022, 11, 663.	1.0	2
3	The German Gestational Diabetes Study (PREG), a prospective multicentre cohort study: rationale, methodology and design. BMJ Open, 2022, 12, e058268.	0.8	5
4	PTBP1 promotes hematopoietic stem cell maintenance and red blood cell development by ensuring sufficient availability of ribosomal constituents. Cell Reports, 2022, 39, 110793.	2.9	3
5	Melatonin promotes regeneration of injured motor axons via MT₁ receptors. Journal of Pineal Research, 2021, 70, e12695.	3.4	21
6	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.	1.4	14
7	Chromatin 3D interaction analysis of the STARD10 locus unveils FCHSD2 as a regulator of insulin secretion. Cell Reports, 2021, 34, 108703.	2.9	4
8	Viral infiltration of pancreatic islets in patients with COVID-19. Nature Communications, 2021, 12, 3534.	5.8	120
9	Multi-omics profiling of living human pancreatic islet donors reveals heterogeneous beta cell trajectories towards type 2 diabetes. Nature Metabolism, 2021, 3, 1017-1031.	5.1	76
10	Sequential in vivo labeling of insulin secretory granule pools inINS-SNAPtransgenic pigs. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	7
11	3D FIB-SEM reconstruction of microtubuleâ€“organelle interaction in whole primary mouse Î² cells. Journal of Cell Biology, 2021, 220, .	2.3	64
12	An open-access volume electron microscopy atlas of whole cells and tissues. Nature, 2021, 599, 147-151.	13.7	80
13	Plasma triacylglycerols are biomarkers of Î²-cell function in mice and humans. Molecular Metabolism, 2021, 54, 101355.	3.0	17
14	MiRâ€375â€mediated suppression of engineered coxsackievirus B3 in pancreatic cells. FEBS Letters, 2020, 594, 763-775.	1.3	9
15	Development of a new mouse model for coxsackievirus-induced myocarditis by attenuating coxsackievirus B3 virulence in the pancreas. Cardiovascular Research, 2020, 116, 1756-1766.	1.8	16
16	MiR-132 controls pancreatic beta cell proliferation and survival through Pten/Akt/Foxo3 signaling. Molecular Metabolism, 2020, 31, 150-162.	3.0	41
17	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.	1.3	9
18	Persistent or Transient Human Î² Cell Dysfunction Induced by Metabolic Stress: Specific Signatures and Shared Gene Expression with Type 2 Diabetes. Cell Reports, 2020, 33, 108466.	2.9	65

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19	The making of insulin in health and disease. Diabetologia, 2020, 63, 1981-1989.	2.9	48
20	The type 2 diabetes gene product STARD10 is a phosphoinositide-binding protein that controls insulin secretory granule biogenesis. Molecular Metabolism, 2020, 40, 101015.	3.0	22
21	Dysfunction of Persisting Î² Cells Is a Key Feature of Early Type 2 Diabetes Pathogenesis. Cell Reports, 2020, 31, 107469.	2.9	93
22	Fostering improved human islet research: a European perspective. Diabetologia, 2019, 62, 1514-1516.	2.9	13
23	Metabolically phenotyped pancreatectomized patients as living donors for the study of islets in health and diabetes. Molecular Metabolism, 2019, 27, S1-S6.	3.0	12
24	Atp6ap2 deletion causes extensive vacuolation that consumes the insulin content of pancreatic Î² cells. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19983-19988.	3.3	23
25	ICA512 RESP18 homology domain is a protein-condensing factor and insulin fibrillation inhibitor. Journal of Biological Chemistry, 2019, 294, 8564-8576.	1.6	10
26	Laser capture microdissection of human pancreatic islets reveals novel eQTLs associated with type 2 diabetes. Molecular Metabolism, 2019, 24, 98-107.	3.0	26
27	Detection of recombinant and endogenous mouse melatonin receptors by monoclonal antibodies targeting the Câ€terminal domain. Journal of Pineal Research, 2019, 66, e12540.	3.4	14
28	The RNA-binding protein PTBP1 is necessary for B cell selection in germinal centers. Nature Immunology, 2018, 19, 267-278.	7.0	63
29	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.	2.9	131
30	Content-aware image restoration: pushing the limits of fluorescence microscopy. Nature Methods, 2018, 15, 1090-1097.	9.0	758
31	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.	1.8	42
32	Virus-like infection induces human Î² cell dedifferentiation. JCI Insight, 2018, 3, .	2.3	53
33	Decreased STARD10 Expression Is Associated with Defective Insulin Secretion in Humans and Mice. American Journal of Human Genetics, 2017, 100, 238-256.	2.6	60
34	Vessel Network Architecture of Adult Human Islets Promotes Distinct Cell-Cell Interactions In Situ and Is Altered After Transplantation. Endocrinology, 2017, 158, 1373-1385.	1.4	65
35	A 4D view on insulin secretory granule turnover in the Î²â€cell. Diabetes, Obesity and Metabolism, 2017, 19, 107-114.	2.2	21
36	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.	3.3	85

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37	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.	1.6	43
38	The splice factor PTBP1 regulates hematopoietic stem cell function and red blood cell development. Experimental Hematology, 2016, 44, S95-S96.	0.2	0
39	The F-actin modifier villin regulates insulin granule dynamics and exocytosis downstream of islet cell autoantigen 512. Molecular Metabolism, 2016, 5, 656-668.	3.0	19
40	Aldehyde dehydrogenase activity is necessary for beta cell development and functionality in mice. Diabetologia, 2016, 59, 139-150.	2.9	17
41	Biochemical, biophysical, and functional properties of ICA512/IA-2 RESP18 homology domain. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2016, 1864, 511-522.	1.1	10
42	A Spatial Model of Insulinâ€Granule Dynamics in Pancreatic Î²â€Cells. Traffic, 2015, 16, 797-813.	1.3	16
43	A human beta cell line with drug inducible excision of immortalizing transgenes. Molecular Metabolism, 2015, 4, 916-925.	3.0	69
44	Blood Glucose Homeostasis in the Course of Partial Pancreatectomy â€“ Evidence for Surgically Reversible Diabetes Induced by Cholestasis. PLoS ONE, 2015, 10, e0134140.	1.1	16
45	Stability of proICA512/IA-2 and Its Targeting to Insulin Secretory Granules Require Î²4-Sheet-Mediated Dimerization of Its Ectodomain in the Endoplasmic Reticulum. Molecular and Cellular Biology, 2015, 35, 914-927.	1.1	13
46	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.	3.3	63
47	X-ray structure of the mature ectodomain of phogrin. Journal of Structural and Functional Genomics, 2015, 16, 1-9.	1.2	8
48	Mechanisms of Beta Cell Dysfunction Associated With Viral Infection. Current Diabetes Reports, 2015, 15, 73.	1.7	43
49	Adaptive Lipid Packing and Bioactivity in Membrane Domains. PLoS ONE, 2015, 10, e0123930.	1.1	96
50	Using pancreas tissue slices for in situ studies of islet of Langerhans and acinar cell biology. Nature Protocols, 2014, 9, 2809-2822.	5.5	94
51	PTBP1 is required for glucose-stimulated cap-independent translation of insulin granule proteins and Coxsackieviruses in beta cells. Molecular Metabolism, 2014, 3, 518-530.	3.0	39
52	Regulation of Î²-cell function by RNA-binding proteins. Molecular Metabolism, 2013, 2, 348-355.	3.0	36
53	Transplantation of human islets without immunosuppression. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19054-19058.	3.3	261
54	Age-Dependent Labeling and Imaging of Insulin Secretory Granules. Diabetes, 2013, 62, 3687-3696.	0.3	58

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55	Effects of immunosuppression on alpha and beta cell renewal in transplanted mouse islets. Diabetologia, 2013, 56, 1596-1604.	2.9	10
56	The Complement Anaphylatoxin C5a Receptor Contributes to Obese Adipose Tissue Inflammation and Insulin Resistance. Journal of Immunology, 2013, 191, 4367-4374.	0.4	97
57	Improved Protocol For Laser Microdissection Of Human Pancreatic Islets From Surgical Specimens. Journal of Visualized Experiments, 2013, , .	0.2	19
58	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.	1.6	14
59	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, 41808-41819.	1.6	31
60	Cholesterolâ€enriched membrane rafts and insulin secretion. Journal of Diabetes Investigation, 2012, 3, 339-346.	1.1	21
61	Polymorphism rs11085226 in the Gene Encoding Polypyrimidine Tract-Binding Protein 1 Negatively Affects Glucose-Stimulated Insulin Secretion. PLoS ONE, 2012, 7, e46154.	1.1	8
62	Novel standards in the measurement of rat insulin granules combining electron microscopy, high-content image analysis and in silico modelling. Diabetologia, 2012, 55, 1013-1023.	2.9	59
63	Isolation of Human Islets from Partially Pancreatectomized Patients. Journal of Visualized Experiments, 2011, , .	0.2	5
64	PTBP1 Is Required for Embryonic Development before Gastrulation. PLoS ONE, 2011, 6, e16992.	1.1	44
65	Protein-Protein Interactions in Crystals of the Human Receptor-Type Protein Tyrosine Phosphatase ICA512 Ectodomain. PLoS ONE, 2011, 6, e24191.	1.1	6
66	Functional assessment of automatically sorted pancreatic islets using large particle flow cytometry. Islets, 2011, 3, 267-270.	0.9	10
67	Human Stiff-Person Syndrome IgG Induces Anxious Behavior in Rats. PLoS ONE, 2011, 6, e16775.	1.1	50
68	Î²2-Syntrophin Is a Cdk5 Substrate That Restrains the Motility of Insulin Secretory Granules. PLoS ONE, 2010, 5, e12929.	1.1	40
69	Impaired insulin turnover in islets from type 2 diabetic patients. Islets, 2010, 2, 30-36.	0.9	20
70	Automated suppression of sample-related artifacts in Fluorescence Correlation Spectroscopy. Optics Express, 2010, 18, 11073.	1.7	26
71	Insulin Release: Shedding Light on a Complex Matter. Cell Metabolism, 2010, 12, 5-6.	7.2	4
72	The insulin secretory granule as a signaling hub. Trends in Endocrinology and Metabolism, 2010, 21, 599-609.	3.1	163

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73	Tamoxifen-Independent Recombination in the RIP-CreER Mouse. PLoS ONE, 2010, 5, e13533.	1.1	51
74	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.	2.5	14
75	Î²â€Cells at the crossroads: choosing between insulin granule production and proliferation. Diabetes, Obesity and Metabolism, 2009, 11, 54-64.	2.2	17
76	ICA69 is a novel Rab2 effector regulating ERâ€“Golgi trafficking in insulinoma cells. European Journal of Cell Biology, 2008, 87, 197-209.	1.6	48
77	ICA512 signaling enhances pancreatic Î²-cell proliferation by regulating cyclins D through STATs. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 674-679.	3.3	53
78	Regulation of Insulin Granule Turnover in Pancreatic Î²-Cells by Cleaved ICA512. Journal of Biological Chemistry, 2008, 283, 33719-33729.	1.6	32
79	Pancreas islets in metabolic signaling - focus on the beta-cell. Frontiers in Bioscience - Landmark, 2008, Volume, 7156.	3.0	75
80	Pancreas islets in metabolic signaling - focus on the &946;-cell. Nature Precedings, 2008, , .	0.1	0
81	Pancreas islets in metabolic signaling - focus on the Î²-cell. Nature Precedings, 2008, , .	0.1	1
82	cAMP-dependent phosphorylation of PTB1 promotes the expression of insulin secretory granule proteins in Î² cells. Cell Metabolism, 2006, 3, 123-134.	7.2	75
83	Synergy of glucose and growth hormone signalling in islet cells through ICA512 and STAT5. Nature Cell Biology, 2006, 8, 435-445.	4.6	74
84	Biogenesis of secretory granules. Current Opinion in Cell Biology, 2006, 18, 365-370.	2.6	82
85	Effect of Oxygenated Perfluorocarbons on Isolated Rat Pancreatic Islets in Culture. Cell Transplantation, 2005, 14, 441-448.	1.2	19
86	An enzymatic cascade of Rab5 effectors regulates phosphoinositide turnover in the endocytic pathway. Journal of Cell Biology, 2005, 170, 607-618.	2.3	354
87	Î²IVÎ£1 spectrin stabilizes the nodes of Ranvier and axon initial segments. Journal of Cell Biology, 2004, 166, 983-990.	2.3	124
88	Nuclear translocation of an ICA512 cytosolic fragment couples granule exocytosis and insulin expression in Î²-cells. Journal of Cell Biology, 2004, 167, 1063-1074.	2.3	70
89	ÂIV Spectrins Are Essential for Membrane Stability and the Molecular Organization of Nodes of Ranvier. Journal of Neuroscience, 2004, 24, 7230-7240.	1.7	125
90	Polypyrimidine tract-binding protein promotes insulin secretory granule biogenesis. Nature Cell Biology, 2004, 6, 207-214.	4.6	155

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91	Secretory granules: and the last shall be firstâ€¦. Trends in Cell Biology, 2003, 13, 399-402.	3.6	15
92	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, 26166-26173.	1.6	33
93	The receptor tyrosine phosphatase-like protein ICA512 binds the PDZ domains of Î²2-syntrophin and nNOS in pancreatic Î²-cells. European Journal of Cell Biology, 2000, 79, 621-630.	1.6	58
94	Î²iv 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.	2.3	242
95	Synaptic Autoimmunity and the Salk Factor. Neuron, 2000, 28, 309-316.	3.8	2
96	Autoimmunity to Gephyrin in Stiff-Man Syndrome. Neuron, 2000, 26, 307-312.	3.8	195
97	Post-translational modifications of ICA512, a receptor tyrosine phosphatase-like protein of secretory granules. European Journal of Neuroscience, 1999, 11, 2609-2620.	1.2	43
98	Molecular dissection of regulated secretory pathways in human gastric enterochromaffin-like cells: an immunohistochemical analysis. Histochemistry and Cell Biology, 1999, 112, 205-214.	0.8	16
99	Vesicular autoantigens of Type 1 diabetes. , 1998, 14, 227-240.		21
100	MFR, a Putative Receptor Mediating the Fusion of Macrophages. Molecular and Cellular Biology, 1998, 18, 6213-6223.	1.1	139
101	STEP₆₁: A Member of a Family of Brain-Enriched PTPs Is Localized to the Endoplasmic Reticulum. Journal of Neuroscience, 1996, 16, 7821-7831.	1.7	74
102	From Th1 to Th2: Diabetes immunotherapy shifts gears. Nature Medicine, 1996, 2, 1311-1312.	15.2	5
103	Coxsackieviruses and diabetes. Nature Medicine, 1995, 1, 25-26.	15.2	25
104	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, 2241-2246.	1.6	74
105	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, 73-79.	1.3	137
106	Genetics of susceptibility and resistance to insulin-dependent diabetes in stiff-man syndrome. Lancet, The, 1994, 344, 1027-1028.	6.3	30
107	GAD, diabetes, and Stiff-Man syndrome: Some progress and more questions. Journal of Endocrinological Investigation, 1994, 17, 509-520.	1.8	29
108	Spotlight on a neuronal enzyme. Nature, 1993, 366, 15-17.	13.7	29

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109	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, 546-551.	13.9	327
110	Autoimmunity to glutamic acid decarboxylase (GAD) in stiffman syndrome and insulin-dependent diabetes mellitus. Trends in Neurosciences, 1991, 14, 452-457.	4.2	177
111	Sudden death and paroxysmal autonomic dysfunction in stiff-man syndrome. Journal of Neurology, 1991, 238, 91-96.	1.8	105
112	Identification of the 64K autoantigen in insulin-dependent diabetes as the GABA-synthesizing enzyme glutamic acid decarboxylase. Nature, 1990, 347, 151-156.	13.7	1,675
113	Autoantibodies to GABA-ergic Neurons and Pancreatic Beta Cells in Stiff-Man Syndrome. New England Journal of Medicine, 1990, 322, 1555-1560.	13.9	684