Santos A. Susin

List of Publications by Citations

126 papers	27,783 citations	71 h-index	128 g-index
128 ext. papers	29,024 ext. citations	7.9 avg, IF	6.13 L-index

#	Paper	IF	Citations
126	Molecular characterization of mitochondrial apoptosis-inducing factor. *Nature*, **1999**, 397, 441-6	50.4	3342
125	Sequential reduction of mitochondrial transmembrane potential and generation of reactive oxygen species in early programmed cell death. *Journal of Experimental Medicine*, **1995**, 182, 367-77	16.6	1406
124	Mitochondrial control of apoptosis. *Trends in Immunology*, **1997**, 18, 44-51		1303
123	Mitochondrial control of nuclear apoptosis. *Journal of Experimental Medicine*, **1996**, 183, 1533-44	16.6	1242
122	Essential role of the mitochondrial apoptosis-inducing factor in programmed cell death. *Nature*, **2001**, 410, 549-54	50.4	1102
121	Bcl-2 inhibits the mitochondrial release of an apoptogenic protease. *Journal of Experimental Medicine*, **1996**, 184, 1331-41	16.6	1029
120	Bax and adenine nucleotide translocator cooperate in the mitochondrial control of apoptosis. *Science*, **1998**, 281, 2027-31	33.3	918
119	Hsp27 negatively regulates cell death by interacting with cytochrome c. *Nature Cell Biology*, **2000**, 2, 645-52	23.4	798
118	Mitochondrial permeability transition is a central coordinating event of apoptosis. *Journal of Experimental Medicine*, **1996**, 184, 1155-60	16.6	752
117	Heat-shock protein 70 antagonizes apoptosis-inducing factor. *Nature Cell Biology*, **2001**, 3, 839-43	23.4	707
116	Mitochondrio-nuclear translocation of AIF in apoptosis and necrosis. *FASEB Journal*, **2000**, 14, 729-739	0.9	657
115	Mitochondrial release of caspase-2 and -9 during the apoptotic process. *Journal of Experimental Medicine*, **1999**, 189, 381-94	16.6	633
114	The permeability transition pore complex: a target for apoptosis regulation by caspases and bcl-2-related proteins. *Journal of Experimental Medicine*, **1998**, 187, 1261-71	16.6	610
113	Two distinct pathways leading to nuclear apoptosis. *Journal of Experimental Medicine*, **2000**, 192, 571-80	16.6	606
112	Mitochondria as regulators of apoptosis: doubt no more. *Biochimica Et Biophysica Acta - Bioenergetics*, **1998**, 1366, 151-65	4.6	602
111	The central executioner of apoptosis: multiple connections between protease activation and mitochondria in Fas/APO-1/CD95- and ceramide-induced apoptosis. *Journal of Experimental Medicine*, **1997**, 186, 25-37	16.6	584
110	The apoptosis-necrosis paradox. Apoptogenic proteases activated after mitochondrial permeability transition determine the mode of cell death. *Oncogene*, **1997**, 15, 1573-81	9.2	419

109	Apoptosis inducing factor (AIF): a phylogenetically old, caspase-independent effector of cell death. *Cell Death and Differentiation*, **1999**, 6, 516-24	12.7	406
108	Mitochondria and programmed cell death: back to the future. *FEBS Letters*, **1996**, 396, 7-13	3.8	405
107	The HIV-1 viral protein R induces apoptosis via a direct effect on the mitochondrial permeability transition pore. *Journal of Experimental Medicine*, **2000**, 191, 33-46	16.6	390
106	Subcellular and submitochondrial mode of action of Bcl-2-like oncoproteins. *Oncogene*, **1998**, 16, 2265-82	9.2	357
105	Inhibitors of permeability transition interfere with the disruption of the mitochondrial transmembrane potential during apoptosis. *FEBS Letters*, **1996**, 384, 53-7	3.8	353
104	Apoptosis-inducing factor (AIF): a ubiquitous mitochondrial oxidoreductase involved in apoptosis. *FEBS Letters*, **2000**, 476, 118-23	3.8	338
103	NADH oxidase activity of mitochondrial apoptosis-inducing factor. *Journal of Biological Chemistry*, **2001**, 276, 16391-8	5.4	300
102	Activation of mitochondria and release of mitochondrial apoptogenic factors by betulinic acid. *Journal of Biological Chemistry*, **1998**, 273, 33942-8	5.4	270
101	Sequential activation of poly(ADP-ribose) polymerase 1, calpains, and Bax is essential in apoptosis-inducing factor-mediated programmed necrosis. *Molecular and Cellular Biology*, **2007**, 27, 4844-62	4.8	270
100	Arsenite induces apoptosis via a direct effect on the mitochondrial permeability transition pore. *Experimental Cell Research*, **1999**, 249, 413-21	4.2	267
99	Oxidation of a critical thiol residue of the adenine nucleotide translocator enforces Bcl-2-independent permeability transition pore opening and apoptosis. *Oncogene*, **2000**, 19, 307-14	9.2	263
98	Programmed cell death via mitochondria: different modes of dying. *Biochemistry (Moscow)*, **2005**, 70, 231-9	2.9	239
97	Disruption of the outer mitochondrial membrane as a result of large amplitude swelling: the impact of irreversible permeability transition. *FEBS Letters*, **1998**, 426, 111-6	3.8	232
96	PK11195, a ligand of the mitochondrial benzodiazepine receptor, facilitates the induction of apoptosis and reverses Bcl-2-mediated cytoprotection. *Experimental Cell Research*, **1998**, 241, 426-34	4.2	230
95	Sequential acquisition of mitochondrial and plasma membrane alterations during early lymphocyte apoptosis. *Journal of Immunology*, **1996**, 157, 512-21	5.3	221
94	Dominant cell death induction by extramitochondrially targeted apoptosis-inducing factor. *FASEB Journal*, **2001**, 15, 758-67	0.9	210
93	Cell type specific involvement of death receptor and mitochondrial pathways in drug-induced apoptosis. *Oncogene*, **2001**, 20, 1063-75	9.2	206
92	Glutathione depletion is an early and calcium elevation is a late event of thymocyte apoptosis. *Journal of Immunology*, **1997**, 158, 4612-9	5.3	204

91	Apoptosis control in syncytia induced by the HIV type 1-envelope glycoprotein complex: role of mitochondria and caspases. *Journal of Experimental Medicine*, **2000**, 192, 1081-92	16.6	203
90	Redox regulation of apoptosis: impact of thiol oxidation status on mitochondrial function. *European Journal of Immunology*, **1997**, 27, 289-96	6.1	199
89	Nitric oxide induces apoptosis via triggering mitochondrial permeability transition. *FEBS Letters*, **1997**, 410, 373-7	3.8	188
88	Cytofluorometric detection of mitochondrial alterations in early CD95/Fas/APO-1-triggered apoptosis of Jurkat T lymphoma cells. Comparison of seven mitochondrion-specific fluorochromes. *Immunology Letters*, **1998**, 61, 157-63	4.1	184
87	Lonidamine triggers apoptosis via a direct, Bcl-2-inhibited effect on the mitochondrial permeability transition pore. *Oncogene*, **1999**, 18, 2537-46	9.2	174
86	Bcl-2 down-regulation causes autophagy in a caspase-independent manner in human leukemic HL60 cells. *Cell Death and Differentiation*, **2000**, 7, 1263-9	12.7	166
85	Mitochondrial permeability transition triggers lymphocyte apoptosis. *Journal of Immunology*, **1996**, 157, 4830-6	5.3	162
84	Mass spectrometric identification of proteins released from mitochondria undergoing permeability transition. *Cell Death and Differentiation*, **2000**, 7, 137-44	12.7	160
83	AIF promotes chromatinolysis and caspase-independent programmed necrosis by interacting with histone H2AX. *EMBO Journal*, **2010**, 29, 1585-99	13	157
82	GD3 ganglioside directly targets mitochondria in a bcl-2-controlled fashion. *FASEB Journal*, **2000**, 14, 2047-54	0.9	156
81	Apoptosis-associated derangement of mitochondrial function in cells lacking mitochondrial DNA. *Cancer Research*, **1996**, 56, 2033-8	10.1	149
80	Chloromethyl-X-Rosamine is an aldehyde-fixable potential-sensitive fluorochrome for the detection of early apoptosis. *Cytometry*, **1996**, 25, 333-40		145
79	Relocalization of apoptosis-inducing factor in photoreceptor apoptosis induced by retinal detachment in vivo. *American Journal of Pathology*, **2001**, 158, 1271-8	5.8	144
78	The thiol crosslinking agent diamide overcomes the apoptosis-inhibitory effect of Bcl-2 by enforcing mitochondrial permeability transition. *Oncogene*, **1998**, 16, 1055-63	9.2	141
77	AIF-mediated programmed necrosis: a highly regulated way to die. *Cell Cycle*, **2007**, 6, 2612-9	4.7	136
76	The crystal structure of the mouse apoptosis-inducing factor AIF. *Nature Structural Biology*, **2002**, 9, 442-6		136
75	Mitochondrial effectors in caspase-independent cell death. *FEBS Letters*, **2004**, 557, 14-20	3.8	130
74	AIF-mediated caspase-independent necroptosis: a new chance for targeted therapeutics. *IUBMB Life*, **2011**, 63, 221-32	4.7	123

73	Critical role of photoreceptor apoptosis in functional damage after retinal detachment. *Current Eye Research*, **2002**, 24, 161-72	2.9	120
72	Apoptosis-inducing factor mediates microglial and neuronal apoptosis caused by pneumococcus. *Journal of Infectious Diseases*, **2001**, 184, 1300-9	7	119
71	Caspases disrupt mitochondrial membrane barrier function. *FEBS Letters*, **1998**, 427, 198-202	3.8	108
70	Therapeutic potential of AIF-mediated caspase-independent programmed cell death. *Drug Resistance Updates*, **2007**, 10, 235-55	23.2	108
69	Mitochondrial permeability transition in apoptosis and necrosis. *Cell Biology and Toxicology*, **1998**, 14, 141-5	7.4	105
68	Mitochondrial membrane permeabilization during the apoptotic process. *Annals of the New York Academy of Sciences*, **1999**, 887, 18-30	6.5	105
67	Cysteine protease inhibition prevents mitochondrial apoptosis-inducing factor (AIF) release. *Cell Death and Differentiation*, **2005**, 12, 1445-8	12.7	103
66	The pH Requirement for in Vivo Activity of the Iron-Deficiency-Induced "Turbo" Ferric Chelate Reductase (A Comparison of the Iron-Deficiency-Induced Iron Reductase Activities of Intact Plants and Isolated Plasma Membrane Fractions in Sugar Beet). *Plant Physiology*, **1996**, 110, 111-123	6.6	102
65	A role of the mitochondrial apoptosis-inducing factor in granulysin-induced apoptosis. *Journal of Immunology*, **2001**, 167, 1222-9	5.3	98
64	BID regulates AIF-mediated caspase-independent necroptosis by promoting BAX activation. *Cell Death and Differentiation*, **2012**, 19, 245-56	12.7	95
63	HIV induces lymphocyte apoptosis by a p53-initiated, mitochondrial-mediated mechanism. *FASEB Journal*, **2001**, 15, 5-6	0.9	94
62	Clearance of apoptotic photoreceptors: elimination of apoptotic debris into the subretinal space and macrophage-mediated phagocytosis via phosphatidylserine receptor and integrin alphavbeta3. *American Journal of Pathology*, **2003**, 162, 1869-79	5.8	85
61	Drp1 mediates caspase-independent type III cell death in normal and leukemic cells. *Molecular and Cellular Biology*, **2007**, 27, 7073-88	4.8	82
60	Caspase-independent commitment phase to apoptosis in activated blood T lymphocytes: reversibility at low apoptotic insult. *Blood*, **2000**, 96, 1030-1038	2.2	82
59	The novel retinoid 6-[3-(1-adamantyl)-4-hydroxyphenyl]-2-naphtalene carboxylic acid can trigger apoptosis through a mitochondrial pathway independent of the nucleus. *Cancer Research*, **1999**, 59, 6257-66	10.1	82
58	Nutrient sensing and insulin signaling in neuropeptide-expressing immortalized, hypothalamic neurons: A cellular model of insulin resistance. *Cell Cycle*, **2010**, 9, 3186-93	4.7	73
57	The contribution of apoptosis-inducing factor, caspase-activated DNase, and inhibitor of caspase-activated DNase to the nuclear phenotype and DNA degradation during apoptosis. *Journal of Biological Chemistry*, **2005**, 280, 35670-83	5.4	73
56	A cytofluorometric assay of nuclear apoptosis induced in a cell-free system: application to ceramide-induced apoptosis. *Experimental Cell Research*, **1997**, 236, 397-403	4.2	71

55	AIF-mediated caspase-independent necroptosis requires ATM and DNA-PK-induced histone H2AX Ser139 phosphorylation. *Cell Death and Disease*, **2012**, 3, e390	9.8	65
54	Pre-processed caspase-9 contained in mitochondria participates in apoptosis. *Cell Death and Differentiation*, **2002**, 9, 82-8	12.7	64
53	AIFsh, a novel apoptosis-inducing factor (AIF) pro-apoptotic isoform with potential pathological relevance in human cancer. *Journal of Biological Chemistry*, **2006**, 281, 6413-27	5.4	63
52	Histone H2AX: The missing link in AIF-mediated caspase-independent programmed necrosis. *Cell Cycle*, **2010**, 9, 3166-73	4.7	62
51	Palmitate induces apoptosis via a direct effect on mitochondria. *Apoptosis: an International Journal on Programmed Cell Death*, **1999**, 4, 81-7	5.4	61
50	CD47 in the immune response: role of thrombospondin and SIRP-alpha reverse signaling. *Current Drug Targets*, **2008**, 9, 842-50	3	60
49	Flavin excretion from roots of iron-deficient sugar beet (Beta vulgaris L.). *Planta*, **1994**, 193, 514-519	4.7	54
48	Regulation of apoptosis/necrosis execution in cadmium-treated human promonocytic cells under different forms of oxidative stress. *Apoptosis: an International Journal on Programmed Cell Death*, **2006**, 11, 673-86	5.4	51
47	A dual role of IFN-alpha in the balance between proliferation and death of human CD4+ T lymphocytes during primary response. *Journal of Immunology*, **2004**, 173, 3740-7	5.3	49
46	Identification and characterization of AIFsh2, a mitochondrial apoptosis-inducing factor (AIF) isoform with NADH oxidase activity. *Journal of Biological Chemistry*, **2006**, 281, 18507-18	5.4	43
45	Mitochondrial dysfunction in CD47-mediated caspase-independent cell death: ROS production in the absence of cytochrome c and AIF release. *Biochimie*, **2003**, 85, 741-6	4.6	43
44	Purification of mitochondria for apoptosis assays. *Methods in Enzymology*, **2000**, 322, 205-8	1.7	43
43	Use of penetrating peptides interacting with PP1/PP2A proteins as a general approach for a drug phosphatase technology. *Molecular Pharmacology*, **2006**, 69, 1115-24	4.3	42
42	CD44 ligation induces caspase-independent cell death via a novel calpain/AIF pathway in human erythroleukemia cells. *Oncogene*, **2006**, 25, 5741-51	9.2	40
41	CD47 agonist peptides induce programmed cell death in refractory chronic lymphocytic leukemia B cells via PLC activation: evidence from mice and humans. *PLoS Medicine*, **2015**, 12, e1001796	11.6	39
40	Annonaceous acetogenins: the hydroxyl groups and THF rings are crucial structural elements for targeting the mitochondria, demonstration with the synthesis of fluorescent squamocin analogues. *ChemBioChem*, **2005**, 6, 979-82	3.8	39
39	Expression of dengue ApoptoM sequence results in disruption of mitochondrial potential and caspase activation. *Biochimie*, **2003**, 85, 789-93	4.6	35
38	Structural insights into the coenzyme mediated monomer-dimer transition of the pro-apoptotic apoptosis inducing factor. *Biochemistry*, **2014**, 53, 4204-15	3.2	32

37	AIF loss deregulates hematopoiesis and reveals different adaptive metabolic responses in bone marrow cells and thymocytes. *Cell Death and Differentiation*, **2018**, 25, 983-1001	12.7	31
36	Expression of cortical and hippocampal apoptosis-inducing factor (AIF) in aging and Alzheimer's disease. *Neurobiology of Aging*, **2007**, 28, 351-6	5.6	31
35	CD47 agonist peptide PKHB1 induces immunogenic cell death in T-cell acute lymphoblastic leukemia cells. *Cancer Science*, **2019**, 110, 256-268	6.9	28
34	Revisiting Neutrophil Gelatinase-Associated Lipocalin (NGAL) in Cancer: Saint or Sinner?. *Cancers*, **2018**, 10,	6.6	28
33	High level of Bcl-2 counteracts apoptosis mediated by a live rabies virus vaccine strain and induces long-term infection. *Virology*, **2003**, 314, 549-61	3.6	26
32	Different contribution of BH3-only proteins and caspases to doxorubicin-induced apoptosis in p53-deficient leukemia cells. *Biochemical Pharmacology*, **2010**, 79, 1746-58	6	25
31	Gain in the short arm of chromosome 2 (2p+) induces gene overexpression and drug resistance in chronic lymphocytic leukemia: analysis of the central role of XPO1. *Leukemia*, **2017**, 31, 1625-1629	10.7	22
30	Highly cytotoxic and neurotoxic acetogenins of the Annonaceae: new putative biological targets of squamocin detected by activity-based protein profiling. *Bioorganic and Medicinal Chemistry Letters*, **2008**, 18, 5741-4	2.9	22
29	Caspase-independent type III programmed cell death in chronic lymphocytic leukemia: the key role of the F-actin cytoskeleton. *Haematologica*, **2009**, 94, 507-17	6.6	19
28	Apoptosis inversely correlates with rabies virus neurotropism. *Annals of the New York Academy of Sciences*, **2003**, 1010, 598-603	6.5	19
27	Concomitant elevations of MMP-9, NGAL, proMMP-9/NGAL and neutrophil elastase in serum of smokers with chronic obstructive pulmonary disease. *Journal of Cellular and Molecular Medicine*, **2017**, 21, 1280-1291	5.6	17
26	Semisynthesis and screening of a small library of pro-apoptotic squamocin analogues: selection and study of a benzoquinone hybrid with an improved biological profile. *ChemMedChem*, **2006**, 1, 118-29	3.7	17
25	Involvement of apoptosis-inducing factor during dolichyl monophosphate-induced apoptosis in U937 cells. *FEBS Letters*, **2000**, 480, 197-200	3.8	17
24	CD47(low) status on CD4 effectors is necessary for the contraction/resolution of the immune response in humans and mice. *PLoS ONE*, **2012**, 7, e41972	3.7	16
23	Thrombospondin-1 Mimetic Agonist Peptides Induce Selective Death in Tumor Cells: Design, Synthesis, and Structure-Activity Relationship Studies. *Journal of Medicinal Chemistry*, **2016**, 59, 8412-21	8.3	15
22	Functional assessment of p53 in chronic lymphocytic leukemia. *Blood Cancer Journal*, **2011**, 1, e5	7	12
21	CD47(high) expression on CD4 effectors identifies functional long-lived memory T cell progenitors. *Journal of Immunology*, **2012**, 188, 4249-55	5.3	12
20	The oxido-reductase activity of the apoptosis inducing factor: a promising pharmacological tool?. *Current Pharmaceutical Design*, **2013**, 19, 2628-36	3.3	10

19	Genetic characterization of B-cell prolymphocytic leukemia: a prognostic model involving MYC and TP53. *Blood*, **2019**, 134, 1821-1831	2.2	8
18	Key Residues Regulating the Reductase Activity of the Human Mitochondrial Apoptosis Inducing Factor. *Biochemistry*, **2015**, 54, 5175-84	3.2	8
17	Mitochondrial AIF loss causes metabolic reprogramming, caspase-independent cell death blockade, embryonic lethality, and perinatal hydrocephalus. *Molecular Metabolism*, **2020**, 40, 101027	8.8	8
16	Caspase-independent type III PCD: a new means to modulate cell death in chronic lymphocytic leukemia. *Leukemia*, **2009**, 23, 974-7	10.7	8
15	Gain of the short arm of chromosome 2 (2p gain) has a significant role in drug-resistant chronic lymphocytic leukemia. *Cancer Medicine*, **2019**, 8, 3131-3141	4.8	7
14	Caspase-independent commitment phase to apoptosis in activated blood T lymphocytes: reversibility at low apoptotic insult. *Blood*, **2000**, 96, 1030-1038	2.2	7
13	"Double-hit" chronic lymphocytic leukemia: An aggressive subgroup with 17p deletion and 8q24 gain. *American Journal of Hematology*, **2018**, 93, 375-382	7.1	7
12	Authors' response: Chloromethyl-X-Rosamine□ fluorochrome for the determination of the mitochondrial transmembrane potential. *Cytometry*, **1998**, 31, 75-75		5
11	Cytofluorometric quantitation of nuclear apoptosis induced in a cell-free system. *Methods in Enzymology*, **2000**, 322, 198-201	1.7	5
10	Thermospray and electrospray mass spectrometry of flavocoenzymes. Analysis of riboflavin sulphates from sugar beet. *Analytica Chimica Acta*, **1995**, 302, 215-223	6.6	5
9	Mitochondrial OXPHOS influences immune cell fate: lessons from hematopoietic AIF-deficient and NDUFS4-deficient mouse models. *Cell Death and Disease*, **2018**, 9, 581	9.8	5
8	Targeting chronic lymphocytic leukemia with N-methylated thrombospondin-1-derived peptides overcomes drug resistance. *Blood Advances*, **2019**, 3, 2920-2933	7.8	4
7	Homotrimerization Approach in the Design of Thrombospondin-1 Mimetic Peptides with Improved Potency in Triggering Regulated Cell Death of Cancer Cells. *Journal of Medicinal Chemistry*, **2019**, 62, 7656-7668	8.3	3
6	Photosynthetic characteristics of iron chlorotic pear (Pyrus commuais L.). *Journal of Plant Nutrition*, **1992**, 15, 1783-1790	2.3	3
5	Relation of Neutrophil Gelatinase-Associated Lipocalin Overexpression to the Resistance to Apoptosis of Tumor B Cells in Chronic Lymphocytic Leukemia. *Cancers*, **2020**, 12,	6.6	2
4	Activation of Interferon Signaling in Chronic Lymphocytic Leukemia Cells Contributes to Apoptosis Resistance via a JAK-Src/STAT3/Mcl-1 Signaling Pathway. *Biomedicines*, **2021**, 9,	4.8	2
3	Simplification of complex peptide mixtures for proteomic analysis: Reversible biotinylation of cysteinyl peptides **2000**, 21, 1635		2
2	The Gain of the Short Arm of Chromosome 2 (2p+) Induces XPO1 Overexpression and Drug Resistance in Chronic Lymphocytic Leukemia. *Blood*, **2015**, 126, 492-492	2.2	1

List of Publications

1 Programmed Necrosis: A New Cell Death Outcome for Injured Adult Neurons? **2010**, 35-66