Angeles Almeida

List of Publications by Citations

96 papers	6,635 citations	44 h-index	81 g-index
99 ext. papers	7,454 ext. citations	7.8 avg, IF	5.75 L-index

#	Paper	IF	Citations
96	The bioenergetic and antioxidant status of neurons is controlled by continuous degradation of a key glycolytic enzyme by APC/C-Cdh1. *Nature Cell Biology*, **2009**, 11, 747-52	23.4	524
95	Nitric oxide-mediated mitochondrial damage in the brain: mechanisms and implications for neurodegenerative diseases. *Journal of Neurochemistry*, **1997**, 68, 2227-40	6	393
94	Nitric oxide switches on glycolysis through the AMP protein kinase and 6-phosphofructo-2-kinase pathway. *Nature Cell Biology*, **2004**, 6, 45-51	23.4	355
93	Different responses of astrocytes and neurons to nitric oxide: the role of glycolytically generated ATP in astrocyte protection. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 15294-9	11.5	325
92	Glycolysis: a bioenergetic or a survival pathway?. *Trends in Biochemical Sciences*, **2010**, 35, 145-9	10.3	244
91	Roles of nitric oxide in brain hypoxia-ischemia. *Biochimica Et Biophysica Acta - Bioenergetics*, **1999**, 1411, 415-36	4.6	238
90	Mitochondrial respiratory chain and free radical generation in stroke. *Free Radical Biology and Medicine*, **2005**, 39, 1291-304	7.8	187
89	Oxygen and glucose deprivation induces mitochondrial dysfunction and oxidative stress in neurones but not in astrocytes in primary culture. *Journal of Neurochemistry*, **2002**, 81, 207-17	6	183
88	Antioxidant and bioenergetic coupling between neurons and astrocytes. *Biochemical Journal*, **2012**, 443, 3-11	3.8	177
87	Complex I assembly into supercomplexes determines differential mitochondrial ROS production in neurons and astrocytes. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 13063-13068	11.5	175
86	Neuroprotective role of antidiabetic drug metformin against apoptotic cell death in primary cortical neurons. *Journal of Molecular Neuroscience*, **2008**, 34, 77-87	3.3	170
85	Interrelationships between astrocyte function, oxidative stress and antioxidant status within the central nervous system. *Progress in Neurobiology*, **1997**, 52, 261-81	10.9	140
84	A transient inhibition of mitochondrial ATP synthesis by nitric oxide synthase activation triggered apoptosis in primary cortical neurons. *Journal of Neurochemistry*, **2001**, 77, 676-90	6	140
83	E3 ubiquitin ligase APC/C-Cdh1 accounts for the Warburg effect by linking glycolysis to cell proliferation. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 738-41	11.5	135
82	Peroxisome proliferator-activated receptor gamma thiazolidinedione agonists increase glucose metabolism in astrocytes. *Journal of Biological Chemistry*, **2003**, 278, 5828-36	5.4	132
81	Glutamate neurotoxicity is associated with nitric oxide-mediated mitochondrial dysfunction and glutathione depletion. *Brain Research*, **1998**, 790, 209-16	3.7	128
80	Peroxynitrite protects neurons against nitric oxide-mediated apoptosis. A key role for glucose-6-phosphate dehydrogenase activity in neuroprotection. *Journal of Biological Chemistry*, **2003**, 278, 864-74	5.4	123

79	Cdh1/Hct1-APC is essential for the survival of postmitotic neurons. *Journal of Neuroscience*, **2005**, 25, 8115-21	6.6	120
78	Effect of reperfusion following cerebral ischaemia on the activity of the mitochondrial respiratory chain in the gerbil brain. *Journal of Neurochemistry*, **1995**, 65, 1698-703	6	112
77	Astrocyte NMDA receptorsRactivity sustains neuronal survival through a Cdk5-Nrf2 pathway. *Cell Death and Differentiation*, **2015**, 22, 1877-89	12.7	95
76	Glutamylcysteine detoxifies reactive oxygen species by acting as glutathione peroxidase-1 cofactor. *Nature Communications*, **2012**, 3, 718	17.4	90
75	Cdk5 phosphorylates Cdh1 and modulates cyclin B1 stability in excitotoxicity. *EMBO Journal*, **2008**, 27, 2736-45	13	90
74	Changes of respiratory chain activity in mitochondrial and synaptosomal fractions isolated from the gerbil brain after graded ischaemia. *Journal of Neurochemistry*, **1995**, 64, 2222-9	6	88
73	Mitochondria and reactive oxygen and nitrogen species in neurological disorders and stroke: Therapeutic implications. *Advanced Drug Delivery Reviews*, **2009**, 61, 1299-315	18.5	84
72	Excitotoxic stimulus stabilizes PFKFB3 causing pentose-phosphate pathway to glycolysis switch and neurodegeneration. *Cell Death and Differentiation*, **2012**, 19, 1582-9	12.7	82
71	Regulation of glycolysis and pentose-phosphate pathway by nitric oxide: impact on neuronal survival. *Biochimica Et Biophysica Acta - Bioenergetics*, **2008**, 1777, 789-93	4.6	78
70	Inhibition of PTEN by peroxynitrite activates the phosphoinositide-3-kinase/Akt neuroprotective signaling pathway. *Journal of Neurochemistry*, **2007**, 102, 194-205	6	69
69	Induction of glucose-6-phosphate dehydrogenase by lipopolysaccharide contributes to preventing nitric oxide-mediated glutathione depletion in cultured rat astrocytes. *Journal of Neurochemistry*, **1999**, 72, 1750-8	6	69
68	Glucose metabolism links astroglial mitochondria to cannabinoid effects. *Nature*, **2020**, 583, 603-608	50.4	66
67	Inhibition of mitochondrial respiration by nitric oxide rapidly stimulates cytoprotective GLUT3-mediated glucose uptake through 5RAMP-activated protein kinase. *Biochemical Journal*, **2004**, 384, 629-36	3.8	65
66	PINK1 deficiency sustains cell proliferation by reprogramming glucose metabolism through HIF1. *Nature Communications*, **2014**, 5, 4514	17.4	64
65	D-Glucose prevents glutathione oxidation and mitochondrial damage after glutamate receptor stimulation in rat cortical primary neurons. *Journal of Neurochemistry*, **2000**, 75, 1618-24	6	63
64	Knockdown of glutamate-cysteine ligase by small hairpin RNA reveals that both catalytic and modulatory subunits are essential for the survival of primary neurons. *Journal of Biological Chemistry*, **2005**, 280, 38992-9001	5.4	62
63	A rapid method for the isolation of metabolically active mitochondria from rat neurons and astrocytes in primary culture. *Brain Research Protocols*, **1998**, 2, 209-14		61
62	Astrocytic mitochondrial ROS modulate brain metabolism and mouse behaviour. *Nature Metabolism* , **2019**, 1, 201-211	14.6	59

61	APC/C-Cdh1 coordinates neurogenesis and cortical size during development. *Nature Communications*, **2013**, 4, 2879	17.4	56
60	Postnatal development of the complexes of the electron transport chain in isolated rat brain mitochondria. *Developmental Neuroscience*, **1994**, 16, 321-7	2.2	54
59	Brain energy metabolism in glutamate-receptor activation and excitotoxicity: role for APC/C-Cdh1 in the balance glycolysis/pentose phosphate pathway. *Neurochemistry International*, **2013**, 62, 750-6	4.4	53
58	Bilirubin selectively inhibits cytochrome c oxidase activity and induces apoptosis in immature cortical neurons: assessment of the protective effects of glycoursodeoxycholic acid. *Journal of Neurochemistry*, **2010**, 112, 56-65	6	52
57	Retinoic acid downregulates Rae1 leading to APC(Cdh1) activation and neuroblastoma SH-SY5Y differentiation. *Oncogene*, **2008**, 27, 3339-44	9.2	50
56	Regulatory T cells modulate inflammation and reduce infarct volume in experimental brain ischaemia. *Journal of Cellular and Molecular Medicine*, **2014**, 18, 1571-9	5.6	49
55	The human Tp53 Arg72Pro polymorphism explains different functional prognosis in stroke. *Journal of Experimental Medicine*, **2011**, 208, 429-37	16.6	47
54	Tetrahydrobiopterin deficiency increases neuronal vulnerability to hypoxia. *Journal of Neurochemistry*, **2002**, 82, 1148-59	6	45
53	Nitric oxide mediates glutamate-induced mitochondrial depolarization in rat cortical neurons. *Brain Research*, **1999**, 816, 580-6	3.7	45
52	Provoking neuroprotection by peroxynitrite. *Current Pharmaceutical Design*, **2004**, 10, 867-77	3.3	44
51	The pentose-phosphate pathway in neuronal survival against nitrosative stress. *IUBMB Life*, **2010**, 62, 14-8	4.7	41
50	Postnatal development of the complexes of the electron transport chain in synaptic mitochondria from rat brain. *Developmental Neuroscience*, **1995**, 17, 212-8	2.2	39
49	Regulation of APC/C-Cdh1 and its function in neuronal survival. *Molecular Neurobiology*, **2012**, 46, 547-54	6.2	37
48	Nitric oxide mediates brain mitochondrial damage during perinatal anoxia. *Brain Research*, **1998**, 787, 117-22	3.7	37
47	Regulation of Bcl-xL-ATP Synthase Interaction by Mitochondrial Cyclin B1-Cyclin-Dependent Kinase-1 Determines Neuronal Survival. *Journal of Neuroscience*, **2015**, 35, 9287-301	6.6	36
46	Poly(ADP-ribose) polymerase-1 protects neurons against apoptosis induced by oxidative stress. *Cell Death and Differentiation*, **2007**, 14, 1211-21	12.7	35
45	Modulation of astroglial energy metabolism by nitric oxide. *Antioxidants and Redox Signaling*, **2006**, 8, 955-65	8.4	35
44	Glutamate excitoxicity is the key molecular mechanism which is influenced by body temperature during the acute phase of brain stroke. *PLoS ONE*, **2012**, 7, e44191	3.7	34

43	DJ1 represses glycolysis and cell proliferation by transcriptionally up-regulating Pink1. *Biochemical Journal*, **2015**, 467, 303-10	3.8	33
42	Expression of glucose transporter GLUT3 by endotoxin in cultured rat astrocytes: the role of nitric oxide. *Journal of Neurochemistry*, **2001**, 79, 17-24	6	33
41	Regulation of glucose metabolism by nitrosative stress in neural cells. *Molecular Aspects of Medicine*, **2004**, 25, 61-73	16.7	33
40	Inhibition of mitochondrial respiration by nitric oxide: its role in glucose metabolism and neuroprotection. *Journal of Neuroscience Research*, **2005**, 79, 166-71	4.4	33
39	Neovascularization and functional recovery after intracerebral hemorrhage is conditioned by the Tp53 Arg72Pro single-nucleotide polymorphism. *Cell Death and Differentiation*, **2017**, 24, 144-154	12.7	28
38	Increased mitochondrial respiration maintains the mitochondrial membrane potential and promotes survival of cerebellar neurons in an endogenous model of glutamate receptor activation. *Journal of Neurochemistry*, **2005**, 92, 183-90	6	27
37	APC/C-Rock2 pathway controls dendritic integrity and memory. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 4513-4518	11.5	26
36	Targeting PFKFB3 alleviates cerebral ischemia-reperfusion injury in mice. *Scientific Reports*, **2019**, 9, 11670	4.9	26
35	Isolation and characterization of tightly coupled mitochondria from neurons and astrocytes in primary culture. *Brain Research*, **1997**, 764, 167-72	3.7	26
34	Cdk5-mediated inhibition of APC/C-Cdh1 switches on the cyclin D1-Cdk4-pRb pathway causing aberrant S-phase entry of postmitotic neurons. *Scientific Reports*, **2015**, 5, 18180	4.9	25
33	Potential mechanisms for nitric oxide-mediated impairment of brain mitochondrial energy metabolism. *Biochemical Society Transactions*, **1997**, 25, 944-9	5.1	25
32	Amyloid-promotes neurotoxicity by Cdk5-induced p53 stabilization. *Neuropharmacology*, **2019**, 146, 19-27	5.5	25
31	Group IIA secretory phospholipase A2 (GIIA) mediates apoptotic death during NMDA receptor activation in rat primary cortical neurons. *Journal of Neurochemistry*, **2010**, 112, 1574-83	6	24
30	Hippocampal neurons require a large pool of glutathione to sustain dendrite integrity and cognitive function. *Redox Biology*, **2018**, 19, 52-61	11.3	23
29	The MDM2-p53 pathway is involved in preconditioning-induced neuronal tolerance to ischemia. *Scientific Reports*, **2018**, 8, 1610	4.9	21
28	Depletion of glutathione up-regulates mitochondrial complex I expression in glial cells. *Journal of Neurochemistry*, **2001**, 76, 1593-6	6	21
27	Peroxynitrite anion stimulates arginine release from cultured rat astrocytes. *Journal of Neurochemistry*, **1999**, 73, 1446-52	6	20
26	Human neuroblastoma cells with MYCN amplification are selectively resistant to oxidative stress by transcriptionally up-regulating glutamate cysteine ligase. *Journal of Neurochemistry*, **2010**, 113, 819-25	6	18

25	Peroxynitrite stimulates L-arginine transport system y(+) in glial cells. A potential mechanism for replenishing neuronal L-arginine. *Journal of Biological Chemistry*, **2002**, 277, 29753-9	5.4	18
24	Linking glycolysis with oxidative stress in neural cells: a regulatory role for nitric oxide. *Biochemical Society Transactions*, **2007**, 35, 1224-7	5.1	17
23	Oxidative stress in preterm rat brain is due to mitochondrial dysfunction. *Pediatric Research*, **2002**, 51, 34-9	3.2	16
22	Mitochondrial Complex I Activity is Conditioned by Supercomplex I-IIIIV Assembly in Brain Cells: Relevance for Parkinson's Disease. *Neurochemical Research*, **2017**, 42, 1676-1682	4.6	13
21	Nitric oxide mediates brain mitochondrial maturation immediately after birth. *FEBS Letters*, **1999**, 452, 290-4	3.8	13
20	Postnatal changes in rhodamine-123 stained mitochondrial populations are sensitive to protein synthesis inhibitors but mimicked in vitro by ATP. *FEBS Letters*, **1994**, 344, 50-4	3.8	13
19	The Neuronal Ischemic Tolerance Is Conditioned by the Tp53 Arg72Pro Polymorphism. *Translational Stroke Research*, **2019**, 10, 204-215	7.8	13
18	A novel human Cdh1 mutation impairs anaphase promoting complex/cyclosome activity resulting in microcephaly, psychomotor retardation, and epilepsy. *Journal of Neurochemistry*, **2019**, 151, 103-115	6	11
17	Genetic determinants of neuronal vulnerability to apoptosis. *Cellular and Molecular Life Sciences*, **2013**, 70, 71-88	10.3	10
16	Energy metabolism in the developing mammalian brain. *Biochemical Society Transactions*, **1994**, 22, 980-3	3.1	10
15	Single-Nucleotide Polymorphism 309T>G in the MDM2 Promoter Determines Functional Outcome After Stroke. *Stroke*, **2018**, 49, 2437-2444	6.7	10
14	Effect of ethanol consumption on adult rat liver mitochondrial populations analyzed by flow cytometry. *Alcoholism: Clinical and Experimental Research*, **1995**, 19, 1327-30	3.7	9
13	Nitric oxide accounts for an increased glycolytic rate in activated astrocytes through a glycogenolysis-independent mechanism. *Brain Research*, **2002**, 945, 131-4	3.7	7
12	Fuel utilization by early newborn brain is preserved under congenital hypothyroidism in the rat. *Pediatric Research*, **1996**, 40, 410-4	3.2	6
11	Nuclear WRAP53 promotes neuronal survival and functional recovery after stroke. *Science Advances* , **2020**, 6,	14.3	6
10	Nitric oxide-mediated mitochondrial impairment in neural cells: a role for glucose metabolism in neuroprotection. *Progress in Brain Research*, **2001**, 132, 441-54	2.9	5
9	Mitochondrial-nuclear p53 trafficking controls neuronal susceptibility in stroke. *IUBMB Life*, **2021**, 73, 582-591	4.7	5
8	Ketogenesis from lactate in rat liver during the perinatal period. *Pediatric Research*, **1992**, 31, 415-8	3.2	4

List of Publications

7	Development of mitochondrial respiratory-chain complexes in neonatal rat brain. *Biochemical Society Transactions*, **1994**, 22, 409S	5.1	2
6	Thyroid Hormones Regulate the Onset of Osmotic Activity of Rat Liver Mitochondria after Birth		2
5	Lactate utilization by neonatal rat liver in vitro. *Biochemical Society Transactions*, **1990**, 18, 1274-5	5.1	1
4	Abrogating mitochondrial ROS in neurons or astrocytes reveals cell-specific impact on mouse behaviour. *Redox Biology*, **2021**, 41, 101917	11.3	1
3	Preconditioning-Activated AKT Controls Neuronal Tolerance to Ischemia through the MDM2-p53 Pathway. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	1
2	Aberrant upregulation of the glycolytic enzyme PFKFB3 in CLN7 neuronal ceroid lipofuscinosis.. *Nature Communications*, **2022**, 13, 536	17.4	0
1	Amyloid-Induces Cdh1-Mediated Rock2 Stabilization Causing Neurodegeneration.. *Frontiers in Pharmacology*, **2022**, 13, 884470	5.6	0