Luis C Lpez

List of Publications by Citations

99 papers	6,813 citations	49 h-index	81 g-index
103 ext. papers	7,696 ext. citations	6.2 avg, IF	5.45 L-index

#	Paper	IF	Citations
99	Extrapineal melatonin: sources, regulation, and potential functions. *Cellular and Molecular Life Sciences*, **2014**, 71, 2997-3025	10.3	562
98	Extrapineal melatonin: analysis of its subcellular distribution and daily fluctuations. *Journal of Pineal Research*, **2012**, 52, 217-27	10.4	381
97	Leigh syndrome with nephropathy and CoQ10 deficiency due to decaprenyl diphosphate synthase subunit 2 (PDSS2) mutations. *American Journal of Human Genetics*, **2006**, 79, 1125-9	11	324
96	ADCK3, an ancestral kinase, is mutated in a form of recessive ataxia associated with coenzyme Q10 deficiency. *American Journal of Human Genetics*, **2008**, 82, 661-72	11	247
95	Melatonin protects the mitochondria from oxidative damage reducing oxygen consumption, membrane potential, and superoxide anion production. *Journal of Pineal Research*, **2009**, 46, 188-98	10.4	205
94	A nonsense mutation in COQ9 causes autosomal-recessive neonatal-onset primary coenzyme Q10 deficiency: a potentially treatable form of mitochondrial disease. *American Journal of Human Genetics*, **2009**, 84, 558-66	11	181
93	Melatonin-mitochondria interplay in health and disease. *Current Topics in Medicinal Chemistry*, **2011**, 11, 221-40	3	179
92	Heterogeneity of coenzyme Q10 deficiency: patient study and literature review. *Archives of Neurology*, **2012**, 69, 978-83		150
91	Disruption of the NF-B/NLRP3 connection by melatonin requires retinoid-related orphan receptor- and blocks the septic response in mice. *FASEB Journal*, **2015**, 29, 3863-75	0.9	140
90	Melatonin treatment normalizes plasma pro-inflammatory cytokines and nitrosative/oxidative stress in patients suffering from Duchenne muscular dystrophy. *Journal of Pineal Research*, **2010**, 48, 282-289	10.4	119
89	Reactive oxygen species, oxidative stress, and cell death correlate with level of CoQ10 deficiency. *FASEB Journal*, **2010**, 24, 3733-43	0.9	117
88	Respiratory chain dysfunction and oxidative stress correlate with severity of primary CoQ10 deficiency. *FASEB Journal*, **2008**, 22, 1874-85	0.9	114
87	Inhibition of neuronal nitric oxide synthase activity by N1-acetyl-5-methoxykynuramine, a brain metabolite of melatonin. *Journal of Neurochemistry*, **2006**, 98, 2023-33	6	111
86	Melatonin counteracts inducible mitochondrial nitric oxide synthase-dependent mitochondrial dysfunction in skeletal muscle of septic mice. *Journal of Pineal Research*, **2006**, 40, 71-8	10.4	111
85	Melatonin role in the mitochondrial function. *Frontiers in Bioscience - Landmark*, **2007**, 12, 947-63	2.8	111
84	Unbalanced deoxynucleotide pools cause mitochondrial DNA instability in thymidine phosphorylase-deficient mice. *Human Molecular Genetics*, **2009**, 18, 714-22	5.6	109
83	Long-term melatonin administration protects brain mitochondria from aging. *Journal of Pineal Research*, **2009**, 47, 192-200	10.4	108

82	ETFDH mutations, CoQ10 levels, and respiratory chain activities in patients with riboflavin-responsive multiple acyl-CoA dehydrogenase deficiency. *Neuromuscular Disorders*, **2009**, 19, 212-6	2.9	105
81	Attenuation of cardiac mitochondrial dysfunction by melatonin in septic mice. *FEBS Journal*, **2007**, 274, 2135-47	5.7	103
80	Chronic melatonin treatment reduces the age-dependent inflammatory process in senescence-accelerated mice. *Journal of Pineal Research*, **2007**, 42, 272-9	10.4	102
79	Same molecule but different expression: aging and sepsis trigger NLRP3 inflammasome activation, a target of melatonin. *Journal of Pineal Research*, **2016**, 60, 193-205	10.4	101
78	Melatonin and its brain metabolite N(1)-acetyl-5-methoxykynuramine prevent mitochondrial nitric oxide synthase induction in parkinsonian mice. *Journal of Neuroscience Research*, **2009**, 87, 3002-10	4.4	99
77	Human CoQ10 deficiencies. *BioFactors*, **2008**, 32, 113-8	6.1	99
76	Melatonin blunts the mitochondrial/NLRP3 connection and protects against radiation-induced oral mucositis. *Journal of Pineal Research*, **2015**, 58, 34-49	10.4	97
75	Thymidine kinase 2 (H126N) knockin mice show the essential role of balanced deoxynucleotide pools for mitochondrial DNA maintenance. *Human Molecular Genetics*, **2008**, 17, 2433-40	5.6	89
74	Cellular mechanisms involved in the melatonin inhibition of HT-29 human colon cancer cell proliferation in culture. *Journal of Pineal Research*, **2007**, 43, 195-205	10.4	88
73	Identification of an inducible nitric oxide synthase in diaphragm mitochondria from septic mice: its relation with mitochondrial dysfunction and prevention by melatonin. *International Journal of Biochemistry and Cell Biology*, **2006**, 38, 267-78	5.6	87
72	Combination of melatonin and rapamycin for head and neck cancer therapy: Suppression of AKT/mTOR pathway activation, and activation of mitophagy and apoptosis via mitochondrial function regulation. *Journal of Pineal Research*, **2018**, 64, e12461	10.4	85
71	Mitochondrial COQ9 is a lipid-binding protein that associates with COQ7 to enable coenzyme Q biosynthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, E4697-705	11.5	84
70	Treatment of CoQ(10) deficient fibroblasts with ubiquinone, CoQ analogs, and vitamin C: time- and compound-dependent effects. *PLoS ONE*, **2010**, 5, e11897	3.7	82
69	Pharmacological utility of melatonin in the treatment of septic shock: experimental and clinical evidence. *Journal of Pharmacy and Pharmacology*, **2006**, 58, 1153-65	4.8	82
68	Improved mitochondrial function and increased life span after chronic melatonin treatment in senescent prone mice. *Experimental Gerontology*, **2008**, 43, 749-56	4.5	78
67	Chronic melatonin treatment prevents age-dependent cardiac mitochondrial dysfunction in senescence-accelerated mice. *Free Radical Research*, **2007**, 41, 15-24	4	78
66	Mitochondrial DNA and inflammatory diseases. *Human Genetics*, **2012**, 131, 161-73	6.3	75
65	Dysfunctional Coq9 protein causes predominant encephalomyopathy associated with CoQ deficiency. *Human Molecular Genetics*, **2013**, 22, 1233-48	5.6	72

64	Deoxypyrimidine monophosphate bypass therapy for thymidine kinase 2 deficiency. *EMBO Molecular Medicine*, **2014**, 6, 1016-27	12	70
63	Melatonin protects rats from radiotherapy-induced small intestine toxicity. *PLoS ONE*, **2017**, 12, e0174474	3.7	68
62	Melatonin plus physical exercise are highly neuroprotective in the 3xTg-AD mouse. *Neurobiology of Aging*, **2012**, 33, 1124.e13-29	5.6	67
61	Melatonin administration to wild-type mice and nontreated NLRP3 mutant mice share similar inhibition of the inflammatory response during sepsis. *Journal of Pineal Research*, **2017**, 63, e12410	10.4	66
60	The beneficial effects of melatonin against heart mitochondrial impairment during sepsis: inhibition of iNOS and preservation of nNOS. *Journal of Pineal Research*, **2014**, 56, 71-81	10.4	62
59	Clinical and genetic analysis of lipid storage myopathies. *Muscle and Nerve*, **2009**, 39, 333-42	3.4	61
58	The clinical heterogeneity of coenzyme Q10 deficiency results from genotypic differences in the Coq9 gene. *EMBO Molecular Medicine*, **2015**, 7, 670-87	12	60
57	Cord blood-derived CD34+ hematopoietic cells with low mitochondrial mass are enriched in hematopoietic repopulating stem cell function. *Haematologica*, **2013**, 98, 1022-9	6.6	60
56	Melatonin, clock genes and mitochondria in sepsis. *Cellular and Molecular Life Sciences*, **2017**, 74, 3965-3987	10.3	56
55	Thymidine and deoxyuridine accumulate in tissues of patients with mitochondrial neurogastrointestinal encephalomyopathy (MNGIE). *FEBS Letters*, **2007**, 581, 3410-4	3.8	54
54	Melatonin administration prevents cardiac and diaphragmatic mitochondrial oxidative damage in senescence-accelerated mice. *Journal of Endocrinology*, **2007**, 194, 637-43	4.7	53
53	Acute and chronic mitochondrial respiratory chain deficiency differentially regulate lysosomal biogenesis. *Scientific Reports*, **2017**, 7, 45076	4.9	49
52	Melatonin rescues zebrafish embryos from the parkinsonian phenotype restoring the parkin/PINK1/DJ-1/MUL1 network. *Journal of Pineal Research*, **2016**, 61, 96-107	10.4	49
51	Mechanisms of N-methyl-D-aspartate receptor inhibition by melatonin in the rat striatum. *Journal of Neuroendocrinology*, **2004**, 16, 929-35	3.8	49
50	Melatonin enhances neural stem cell differentiation and engraftment by increasing mitochondrial function. *Journal of Pineal Research*, **2017**, 63, e12415	10.4	48
49	Age-dependent lipopolysaccharide-induced iNOS expression and multiorgan failure in rats: effects of melatonin treatment. *Experimental Gerontology*, **2006**, 41, 1165-73	4.5	48
48	Melatonin and nitric oxide: two required antagonists for mitochondrial homeostasis. *Endocrine*, **2005**, 27, 159-68		48
47	CoQ deficiency causes disruption of mitochondrial sulfide oxidation, a new pathomechanism associated with this syndrome. *EMBO Molecular Medicine*, **2017**, 9, 78-95	12	47

46	Analysis of the daily changes of melatonin receptors in the rat liver. *Journal of Pineal Research*, **2013**, 54, 313-21	10.4	47
45	A review of the melatonin functions in zebrafish physiology. *Journal of Pineal Research*, **2014**, 57, 1-9	10.4	46
44	Ubiquinol-10 ameliorates mitochondrial encephalopathy associated with CoQ deficiency. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2014**, 1842, 893-901	6.9	44
43	The role of mitochondria in brain aging and the effects of melatonin. *Current Neuropharmacology*, **2010**, 8, 182-93	7.6	43
42	Melatonin Enhances Cisplatin and Radiation Cytotoxicity in Head and Neck Squamous Cell Carcinoma by Stimulating Mitochondrial ROS Generation, Apoptosis, and Autophagy. *Oxidative Medicine and Cellular Longevity*, **2019**, 2019, 7187128	6.7	39
41	Melatonin restores the mitochondrial production of ATP in septic mice. *Neuroendocrinology Letters*, **2006**, 27, 623-30	0.3	36
40	Oxidative stress status, clinical outcome, and β-globin gene cluster haplotypes in pediatric patients with sickle cell disease. *European Journal of Haematology*, **2010**, 85, 529-37	3.8	35
39	Antioxidant effect of exercise: Exploring the role of the mitochondrial complex I superassembly. *Redox Biology*, **2017**, 13, 477-481	11.3	34
38	Melatonin protects lung mitochondria from aging. *Age*, **2012**, 34, 681-92		34
37	Melatonin treatment counteracts the hyperoxidative status in erythrocytes of patients suffering from Duchenne muscular dystrophy. *Clinical Biochemistry*, **2011**, 44, 853-8	3.5	31
36	Permeabilized myocardial fibers as model to detect mitochondrial dysfunction during sepsis and melatonin effects without disruption of mitochondrial network. *Mitochondrion*, **2016**, 27, 56-63	4.9	30
35	Identification of morphological markers of sarcopenia at early stage of aging in skeletal muscle of mice. *Experimental Gerontology*, **2016**, 83, 22-30	4.5	28
34	Determination of coenzyme Q10, coenzyme Q9, and melatonin contents in virgin argan oils: comparison with other edible vegetable oils. *Journal of Agricultural and Food Chemistry*, **2011**, 59, 12102-8	5.7	27
33	The Role of Sulfide Oxidation Impairment in the Pathogenesis of Primary CoQ Deficiency. *Frontiers in Physiology*, **2017**, 8, 525	4.6	26
32	Mitochondrial impairment and melatonin protection in parkinsonian mice do not depend of inducible or neuronal nitric oxide synthases. *PLoS ONE*, **2017**, 12, e0183090	3.7	26
31	The Paradox of Coenzyme Q in Aging. *Nutrients*, **2019**, 11,	6.7	25
30	Lack of NLRP3 Inflammasome Activation Reduces Age-Dependent Sarcopenia and Mitochondrial Dysfunction, Favoring the Prophylactic Effect of Melatonin. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2019**, 74, 1699-1708	6.4	24
29	Protective effects of melatonin against oxidative damage induced by Egyptian cobra (Naja haje) crude venom in rats. *Acta Tropica*, **2015**, 143, 58-65	3.2	24

28	Synergism between melatonin and atorvastatin against endothelial cell damage induced by lipopolysaccharide. *Journal of Pineal Research*, **2011**, 51, 324-30	10.4	23
27	CoQ supplementation rescues nephrotic syndrome through normalization of HS oxidation pathway. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2018**, 1864, 3708-3722	6.9	23
26	Comparative analysis of minor bioactive constituents (CoQ10, tocopherols and phenolic compounds) in Arbequina extra virgin olive oils from Brazil and Spain. *Journal of Food Composition and Analysis*, **2017**, 63, 47-54	4.1	21
25	Pathomechanisms in coenzyme q10-deficient human fibroblasts. *Molecular Syndromology*, **2014**, 5, 163-9	1.5	21
24	Identification of mitochondrial deficits and melatonin targets in liver of septic mice by high-resolution respirometry. *Life Sciences*, **2015**, 121, 158-65	6.8	20
23	Lack of aprataxin impairs mitochondrial functions via downregulation of the APE1/NRF1/NRF2 pathway. *Human Molecular Genetics*, **2015**, 24, 4516-29	5.6	19
22	The Protective Effect of Melatonin Against Age-Associated, Sarcopenia-Dependent Tubular Aggregate Formation, Lactate Depletion, and Mitochondrial Changes. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2018**, 73, 1330-1338	6.4	18
21	ERA reduces DMQ/CoQ ratio and rescues the encephalopathic phenotype in mice. *EMBO Molecular Medicine*, **2019**, 11,	12	18
20	Rapamycin administration is not a valid therapeutic strategy for every case of mitochondrial disease. *EBioMedicine*, **2019**, 42, 511-523	8.8	17
19	Detection of 6-demethoxyubiquinone in CoQ deficiency disorders: Insights into enzyme interactions and identification of potential therapeutics. *Molecular Genetics and Metabolism*, **2017**, 121, 216-223	3.7	15
18	Protective effects of synthetic kynurenines on 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced parkinsonism in mice. *Brain Research Bulletin*, **2011**, 85, 133-40	3.9	15
17	Composition and Antioxidant Properties of Spanish Extra Virgin Olive Oil Regarding Cultivar, Harvest Year and Crop Stage. *Antioxidants*, **2019**, 8,	7.1	12
16	Early gender differences in the redox status of the brain mitochondria with age: effects of melatonin therapy. *Hormone Molecular Biology and Clinical Investigation*, **2013**, 16, 91-100	1.3	12
15	Assessment of thymidine phosphorylase function: measurement of plasma thymidine (and deoxyuridine) and thymidine phosphorylase activity. *Methods in Molecular Biology*, **2012**, 837, 121-33	1.4	11
14	In Vivo Determination of Mitochondrial Respiration in 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine-Treated Zebrafish Reveals the Efficacy of Melatonin in Restoring Mitochondrial Normalcy. *Zebrafish*, **2018**, 15, 15-26	2	11
13	Metabolic Targets of Coenzyme Q10 in Mitochondria. *Antioxidants*, **2021**, 10,	7.1	10
12	Bypassing human CoQ deficiency. *Molecular Genetics and Metabolism*, **2018**, 123, 289-291	3.7	10
11	Hydroxytyrosol influences exercise-induced mitochondrial respiratory complex assembly into supercomplexes in rats. *Free Radical Biology and Medicine*, **2019**, 134, 304-310	7.8	8

10	Coenzyme Q10 modulates sulfide metabolism and links the mitochondrial respiratory chain to pathways associated to one carbon metabolism. *Human Molecular Genetics*, **2020**, 29, 3296-3311	5.6	8
9	Abnormalities of hydrogen sulfide and glutathione pathways in mitochondrial dysfunction. *Journal of Advanced Research*, **2021**, 27, 79-84	13	7
8	Argan oil-contained antioxidants for human mitochondria. *Natural Product Communications*, **2013**, 8, 47-50	0.9	7
7	Reduction in the levels of CoQ biosynthetic proteins is related to an increase in lifespan without evidence of hepatic mitohormesis. *Scientific Reports*, **2018**, 8, 14013	4.9	6
6	Argan Oil-contained Antioxidants for Human Mitochondria. *Natural Product Communications*, **2013**, 8, 1934578X1300800	0.9	5
5	Preliminary evidence suggesting that nonmetallic and metallic nanoparticle devices protect against the effects of environmental electromagnetic radiation by reducing oxidative stress and inflammatory status. *European Journal of Integrative Medicine*, **2016**, 8, 835-840	1.7	2
4	RA Targets Mitochondrial Metabolism and Adipogenesis, Leading to Therapeutic Benefits against CoQ Deficiency and Age-Related Overweight. *Biomedicines*, **2021**, 9,	4.8	2
3	Gene Therapy Corrects Mitochondrial Dysfunction in Hematopoietic Progenitor Cells and Fibroblasts from Coq9R239X Mice. *PLoS ONE*, **2016**, 11, e0158344	3.7	1
2	Exposure to non-persistent pesticides, BDNF, and behavioral function in adolescent males: Exploring a novel effect biomarker approach.. *Environmental Research*, **2022**, 113115	7.9	0
1	Coenzyme Q10 Deficiency **2019**, 169-182		