Dario AcuÃ±a-Castroviejo

List of Publications by Year
in descending order

185 papers	13,945 citations	17405 63 h-index	23472 111 g-index
189 all docs	189 docs citations	189 times ranked	11433 citing authors

#	Article	IF	Citations
1	Extrapineal melatonin: sources, regulation, and potential functions. Cellular and Molecular Life Sciences, 2014, 71, 2997-3025.	2.4	766
2	Extrapineal melatonin: analysis of its subcellular distribution and daily fluctuations. Journal of Pineal Research, 2012, 52, 217-227.	3.4	484
3	Melatonin mitigates mitochondrial malfunction. Journal of Pineal Research, 2005, 38, 1-9.	3.4	464
4	Mitochondria and chloroplasts as the original sites of melatonin synthesis: a hypothesis related to melatonin's primary function and evolution in eukaryotes. Journal of Pineal Research, 2013, 54, 127-138.	3.4	440
5	Melatonin, mitochondria, and cellular bioenergetics. Journal of Pineal Research, 2001, 30, 65-74.	3.4	350
6	Free Radicalâ€Mediated Molecular Damage. Annals of the New York Academy of Sciences, 2001, 939, 200-215.	1.8	341
7	Melatonin, a Full Service Anti-Cancer Agent: Inhibition of Initiation, Progression and Metastasis. International Journal of Molecular Sciences, 2017, 18, 843.	1.8	335
8	Melatonin but not vitamins C and E maintains glutathione homeostasis in tâ€butyl hydroperoxideâ€induced mitochondrial oxidative stress. FASEB Journal, 2000, 14, 1677-1679.	0.2	320
9	Melatonin and mitochondrial function. Life Sciences, 2004, 75, 765-790.	2.0	286
10	Melatonin inhibits expression of the inducible NO synthase II in liver and lung and prevents endotoxemia in lipopolysaccharideâ€induced multiple organ dysfunction syndrome in rats. FASEB Journal, 1999, 13, 1537-1546.	0.2	264
11	Alzheimerâ€™s disease: pathological mechanisms and the beneficial role of melatonin. Journal of Pineal Research, 2012, 52, 167-202.	3.4	255
12	Melatonin increases the activity of the oxidative phosphorylation enzymes and the production of ATP in rat brain and liver mitochondria. International Journal of Biochemistry and Cell Biology, 2002, 34, 348-357.	1.2	217
13	Melatonin-mitochondria Interplay in Health and Disease. Current Topics in Medicinal Chemistry, 2011, 11, 221-240.	1.0	216
14	Melatonin stimulates the activity of the detoxifying enzyme glutathione peroxidase in several tissues of chicks. Journal of Pineal Research, 1995, 19, 111-115.	3.4	202
15	Melatonin reduces nitric oxide synthase activity in rat hypothalamus. Journal of Pineal Research, 1996, 20, 205-210.	3.4	200
16	Reactive Oxygen Intermediates, Molecular Damage, and Aging: Relation to Melatonin. Annals of the New York Academy of Sciences, 1998, 854, 410-424.	1.8	194
17	Disruption of the NF-Î¹B/NLRP3 connection by melatonin requires retinoid-related orphan receptor-Î± and blocks the septic response in mice. FASEB Journal, 2015, 29, 3863-3875.	0.2	190
18	Characterization of high-affinity melatonin binding sites in purified cell nuclei of rat liver. Journal of Pineal Research, 1994, 16, 100-112.	3.4	186

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19	Utility of high doses of melatonin as adjunctive anticonvulsant therapy in a child with severe myoclonic epilepsy: Two years' experience. Journal of Pineal Research, 1997, 23, 97-105.	3.4	170
20	Melatonin counteracts lipopolysaccharideâ€induced expression and activity of mitochondrial nitric oxide synthase in rats. FASEB Journal, 2003, 17, 1-22.	0.2	166
21	Melatonin, Mitochondrial Homeostasis and Mitochondrial-Related Diseases. Current Topics in Medicinal Chemistry, 2002, 2, 133-151.	1.0	145
22	Inhibition of neuronal nitric oxide synthase activity by N1-acetyl-5-methoxykynuramine, a brain metabolite of melatonin. Journal of Neurochemistry, 2006, 98, 2023-2033.	2.1	141
23	Combination of melatonin and rapamycin for head and neck cancer therapy: Suppression of <scp>AKT</scp>/<scp>mTOR</scp> pathway activation, and activation of mitophagy and apoptosis via mitochondrial function regulation. Journal of Pineal Research, 2018, 64, e12461.	3.4	131
24	Melatonin treatment normalizes plasma proâ€inflammatory cytokines and nitrosative/oxidative stress in patients suffering from Duchenne muscular dystrophy. Journal of Pineal Research, 2010, 48, 282-289.	3.4	130
25	Melatonin role in the mitochondrial function. Frontiers in Bioscience - Landmark, 2007, 12, 947.	3.0	130
26	Melatonin counteracts inducible mitochondrial nitric oxide synthase-dependent mitochondrial dysfunction in skeletal muscle of septic mice. Journal of Pineal Research, 2006, 40, 71-78.	3.4	129
27	Structure-Related Inhibition of Calmodulin-Dependent Neuronal Nitric-Oxide Synthase Activity by Melatonin and Synthetic Kynurenines. Molecular Pharmacology, 2000, 58, 967-975.	1.0	127
28	Hyperphosphorylation of microtubule-associated protein tau in senescence-accelerated mouse (SAM). Mechanisms of Ageing and Development, 2005, 126, 1300-1304.	2.2	127
29	Attenuation of cardiac mitochondrial dysfunction by melatonin in septic mice. FEBS Journal, 2007, 274, 2135-2147.	2.2	127
30	Same molecule but different expression: aging and sepsis trigger NLRP3 inflammasome activation, a target of melatonin. Journal of Pineal Research, 2016, 60, 193-205.	3.4	125
31	Mitochondrial regulation by melatonin And its metabolites. Advances in Experimental Medicine and Biology, 2003, 527, 549-557.	0.8	123
32	Longâ€term melatonin administration protects brain mitochondria from aging. Journal of Pineal Research, 2009, 47, 192-200.	3.4	121
33	Chronic melatonin treatment reduces the age-dependent inflammatory process in senescence-accelerated mice. Journal of Pineal Research, 2007, 42, 272-279.	3.4	120
34	Melatonin is protective against MPTP-induced striatal and hippocampal lesions. Life Sciences, 1996, 60, PL23-PL29.	2.0	119
35	Melatonin blunts the mitochondrial/<scp>NLRP</scp>3 connection and protects against radiationâ€induced oral mucositis. Journal of Pineal Research, 2015, 58, 34-49.	3.4	118
36	Circadian Rhythms of Dopamine and Dihydroxyphenyl Acetic Acid in the Mouse Striatum: Effects of Pinealectomy and of Melatonin Treatment. Neuroendocrinology, 2002, 75, 201-208.	1.2	110

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37	Exercise and melatonin in humans: reciprocal benefits. Journal of Pineal Research, 2012, 52, 1-11.	3.4	108
38	Melatonin and its brain metabolite N¹â€acetylâ€5â€methoxykynuramine prevent mitochondrial nitric oxide synthase induction in parkinsonian mice. Journal of Neuroscience Research, 2009, 87, 3002-3010.	1.3	106
39	Melatonin: Potential Functions in the Oral Cavity. Journal of Periodontology, 2007, 78, 1094-1102.	1.7	102
40	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.	3.4	102
41	Melatonin's Role as an Anticonvulsant and Neuronal Protector: Experimental and Clinical Evidence. Journal of Child Neurology, 1998, 13, 501-509.	0.7	101
42	Identification of an inducible nitric oxide synthase in diaphragm mitochondria from septic miceIts relation with mitochondrial dysfunction and prevention by melatonin. International Journal of Biochemistry and Cell Biology, 2006, 38, 267-278.	1.2	101
43	Chronic melatonin treatment prevents age-dependent cardiac mitochondrial dysfunction in senescence-accelerated mice. Free Radical Research, 2007, 41, 15-24.	1.5	99
44	Pharmacological utility of melatonin in the treatment of septic shock: experimental and clinical evidence. Journal of Pharmacy and Pharmacology, 2010, 58, 1153-1165.	1.2	98
45	Melatonin in Antinociception: Its Therapeutic Applications. Current Neuropharmacology, 2012, 10, 167-178.	1.4	95
46	Improved mitochondrial function and increased life span after chronic melatonin treatment in senescent prone mice. Experimental Gerontology, 2008, 43, 749-756.	1.2	88
47	Melatonin administration to wildâ€type mice and nontreated <scp>NLRP</scp>3 mutant mice share similar inhibition of the inflammatory response during sepsis. Journal of Pineal Research, 2017, 63, e12410.	3.4	88
48	Dysfunctional Coq9 protein causes predominant encephalomyopathy associated with CoQ deficiency. Human Molecular Genetics, 2013, 22, 1233-1248.	1.4	87
49	Melatonin plus physical exercise are highly neuroprotective in the 3xTg-AD mouse. Neurobiology of Aging, 2012, 33, 1124.e13-1124.e29.	1.5	86
50	Mitochondrial DNA and inflammatory diseases. Human Genetics, 2012, 131, 161-173.	1.8	86
51	Melatonin protects rats from radiotherapy-induced small intestine toxicity. PLoS ONE, 2017, 12, e0174474.	1.1	86
52	Calreticulin-melatonin. FEBS Journal, 2003, 270, 832-840.	0.2	85
53	Melatonin, clock genes and mitochondria in sepsis. Cellular and Molecular Life Sciences, 2017, 74, 3965-3987.	2.4	84
54	Diurnal Variations of Benzodiazepine Binding in Rat Cerebral Cortex: Disruption by Pinealectomy. Journal of Pineal Research, 1986, 3, 101-109.	3.4	83

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55	Melatonin Mitigates Mitochondrial Meltdown: Interactions with SIRT3. International Journal of Molecular Sciences, 2018, 19, 2439.	1.8	80
56	Prophylactic Actions of Melatonin in Oxidative Neurotoxicity. Annals of the New York Academy of Sciences, 1997, 825, 70-78.	1.8	78
57	Melatonin enhances neural stem cell differentiation and engraftment by increasing mitochondrial function. Journal of Pineal Research, 2017, 63, e12415.	3.4	78
58	The clinical heterogeneity of coenzyme Q₁₀ deficiency results from genotypic differences in the Coq9 gene. EMBO Molecular Medicine, 2015, 7, 670-687.	3.3	77
59	Melatonin Increases Following Convulsive Seizures may be Related to its Anticonvulsant Properties at Physiological Concentrations. Neuropediatrics, 2007, 38, 122-125.	0.3	74
60	Synergistic effects of melatonin and deprenyl against MPTP-induced mitochondrial damage and DA depletion. Neurobiology of Aging, 2003, 24, 491-500.	1.5	72
61	The beneficial effects of melatonin against heart mitochondrial impairment during sepsis: inhibition of i<scp><scp>NOS</scp></scp> and preservation of n<scp><scp>NOS</scp></scp>. Journal of Pineal Research, 2014, 56, 71-81.	3.4	72
62	Relationship Between Salivary Melatonin and Severity of Periodontal Disease. Journal of Periodontology, 2006, 77, 1533-1538.	1.7	69
63	Parameters of oxidative stress in saliva from diabetic and parenteral drug addict patients. Journal of Oral Pathology and Medicine, 2006, 35, 554-559.	1.4	68
64	Inhibition of the cdk5/p25 fragment formation may explain the antiapoptotic effects of melatonin in an experimental model of Parkinson's disease. Journal of Pineal Research, 2006, 40, 251-258.	3.4	68
65	Melatonin reduces membrane rigidity and oxidative damage in the brain of SAMP8 mice. Neurobiology of Aging, 2011, 32, 2045-2054.	1.5	65
66	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, 1-12.	1.9	65
67	Analysis of the daily changes of melatonin receptors in the rat liver. Journal of Pineal Research, 2013, 54, 313-321.	3.4	64
68	Melatonin rescues zebrafish embryos from the parkinsonian phenotype restoring the parkin/<scp>PINK</scp>1/<scp>DJ</scp>â€1/<scp>MUL</scp>1 network. Journal of Pineal Research, 2016, 61, 96-107.	3.4	64
69	4,5-Dihydro-1H-pyrazole Derivatives with Inhibitory nNOS Activity in Rat Brain:Â Synthesis and Structureâ”Activity Relationships. Journal of Medicinal Chemistry, 2004, 47, 5641-5650.	2.9	63
70	Clinical trial to test the efficacy of melatonin in COVIDâ€19. Journal of Pineal Research, 2020, 69, e12683.	3.4	62
71	A review of the melatonin functions in zebrafish physiology. Journal of Pineal Research, 2014, 57, 1-9.	3.4	60
72	Modification of Nitric Oxide Synthase Activity and Neuronal Response in Rat Striatum by Melatonin and Kynurenine Derivatives. Journal of Neuroendocrinology, 2008, 10, 297-302.	1.2	59

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73	Accumulation of Exogenous Amyloid-BetaPeptide in Hippocampal Mitochondria Causes Their Dysfunction: A Protective Role for Melatonin. Oxidative Medicine and Cellular Longevity, 2012, 2012, 1-15.	1.9	59
74	Melatonin and metabolic regulation: a review. Food and Function, 2014, 5, 2806-2832.	2.1	59
75	Melatonin in the oral cavity: physiological and pathological implications. Journal of Periodontal Research, 2015, 50, 9-17.	1.4	59
76	CoQ deficiency causes disruption of mitochondrial sulfide oxidation, a new pathomechanism associated with this syndrome. EMBO Molecular Medicine, 2017, 9, 78-95.	3.3	59
77	Protective Effects of Melatonin on the Skin: Future Perspectives. International Journal of Molecular Sciences, 2019, 20, 4948.	1.8	59
78	Changes in brain amino acids and nitric oxide after melatonin administration in rats with pentylenetetrazole-induced seizures. Journal of Pineal Research, 2003, 35, 54-60.	3.4	58
79	Ubiquinol-10 ameliorates mitochondrial encephalopathy associated with CoQ deficiency. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2014, 1842, 893-901.	1.8	56
80	Relationship between salivary melatonin levels and periodontal status in diabetic patients. Journal of Pineal Research, 2003, 35, 239-244.	3.4	55
81	Identification of morphological markers of sarcopenia at early stage of aging in skeletal muscle of mice. Experimental Gerontology, 2016, 83, 22-30.	1.2	55
82	Age-dependent lipopolysaccharide-induced iNOS expression and multiorgan failure in rats: Effects of melatonin treatment. Experimental Gerontology, 2006, 41, 1165-1173.	1.2	54
83	Melatonin and Nitric Oxide: Two Required Antagonists for Mitochondrial Homeostasis. Endocrine, 2005, 27, 159-168.	2.2	53
84	Local Application of Melatonin Into Alveolar Sockets of Beagle Dogs Reduces Tooth Removalâ€“Induced Oxidative Stress. Journal of Periodontology, 2007, 78, 576-583.	1.7	52
85	The Role of Mitochondria in Brain Aging and the Effects of Melatonin. Current Neuropharmacology, 2010, 8, 182-193.	1.4	52
86	Analysis of Plasma MicroRNAs as Predictors and Biomarkers of Aging and Frailty in Humans. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-9.	1.9	51
87	Beneficial effects of melatonin on cardiological alterations in a murine model of accelerated aging. Journal of Pineal Research, 2010, 49, 312-320.	3.4	50
88	Prefrontal cortex, caloric restriction and stress during aging: Studies on dopamine and acetylcholine release, BDNF and working memory. Behavioural Brain Research, 2011, 216, 136-145.	1.2	49
89	Targeting NLRP3 (Nucleotide-Binding Domain, Leucine-Richâ€“Containing Family, Pyrin) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 Vascular Biology, 2018, 38, 2765-2779.	1.1	48
90	Kynurenamines as Neural Nitric Oxide Synthase Inhibitors. Journal of Medicinal Chemistry, 2005, 48, 8174-8181.	2.9	47

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91	Fluorinated indazoles as novel selective inhibitors of nitric oxide synthase (NOS): Synthesis and biological evaluation. Bioorganic and Medicinal Chemistry, 2009, 17, 6180-6187.	1.4	46
92	Pyrazoles and pyrazolines as neural and inducible nitric oxide synthase (nNOS and iNOS) potential inhibitors (III). European Journal of Medicinal Chemistry, 2008, 43, 2579-2591.	2.6	44
93	Oxidative stress status, clinical outcome, and Î²â€globin gene cluster haplotypes in pediatric patients with sickle cell disease. European Journal of Haematology, 2010, 85, 529-537.	1.1	43
94	Melatonin protects lung mitochondria from aging. Age, 2012, 34, 681-692.	3.0	41
95	Day-night variations in melatonin secretion by the pineal gland during febrile and epileptic convulsions in children. Psychiatry Research, 1994, 52, 273-283.	1.7	40
96	Agomelatine in Depressive Disorders: Its Novel Mechanisms of Action. Journal of Neuropsychiatry and Clinical Neurosciences, 2012, 24, 290-308.	0.9	40
97	Melatonin therapy in fibromyalgia. Current Pain and Headache Reports, 2007, 11, 339-342.	1.3	39
98	Melatonin restores the mitochondrial production of ATP in septic mice. Neuroendocrinology Letters, 2006, 27, 623-30.	0.2	39
99	The benefit of a supplement with the antioxidant melatonin on redox status and muscle damage in resistance-trained athletes. Applied Physiology, Nutrition and Metabolism, 2017, 42, 700-707.	0.9	38
100	Effect of Melatonin Supplementation on Antioxidant Status and DNA Damage in High Intensity Trained Athletes. International Journal of Sports Medicine, 2017, 38, 1117-1125.	0.8	38
101	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.	1.7	38
102	Melatonin concentration in the umbilical artery and vein in human preterm and term neonates and neonates with acute fetal distress. Journal of Pineal Research, 1992, 13, 184-191.	3.4	37
103	Melatonin therapy in fibromyalgia. Journal of Pineal Research, 2006, 40, 98-99.	3.4	36
104	Melatonin reduces oxidative stress in erythrocytes and plasma of senescence-accelerated mice. Journal of Pineal Research, 2006, 41, 142-149.	3.4	36
105	Melatonin treatment counteracts the hyperoxidative status in erythrocytes of patients suffering from Duchenne muscular dystrophy. Clinical Biochemistry, 2011, 44, 853-858.	0.8	36
106	Impact of Daylight Saving Time on circadian timing system: An expert statement. European Journal of Internal Medicine, 2019, 60, 1-3.	1.0	35
107	Age-related changes in the rat brain mitochondrial antioxidative enzyme ratios: Modulation by melatonin. Experimental Gerontology, 2012, 47, 706-711.	1.2	34
108	Oral Mucositis: Melatonin Gel an Effective New Treatment. International Journal of Molecular Sciences, 2017, 18, 1003.	1.8	34

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109	Involvement of plasma miRNAs, muscle miRNAs and mitochondrial miRNAs in the pathophysiology of frailty. Experimental Gerontology, 2019, 124, 110637.	1.2	34
110	Mitochondrial impairment and melatonin protection in parkinsonian mice do not depend of inducible or neuronal nitric oxide synthases. PLoS ONE, 2017, 12, e0183090.	1.1	34
111	Permeabilized myocardial fibers as model to detect mitochondrial dysfunction during sepsis and melatonin effects without disruption of mitochondrial network. Mitochondrion, 2016, 27, 56-63.	1.6	31
112	Melatonin/Nrf2/NLRP3 Connection in Mouse Heart Mitochondria during Aging. Antioxidants, 2020, 9, 1187.	2.2	31
113	Inhibition of nNOS Activity in Rat Brain by Synthetic Kynurenines:â€‰Structureâ^'Activity Dependence. Journal of Medicinal Chemistry, 2002, 45, 263-274.	2.9	30
114	Selective CCK-A but not CCK-B receptor antagonists inhibit HT-29 cell proliferation: synergism with pharmacological levels of melatonin. Journal of Pineal Research, 2005, 39, 243-250.	3.4	30
115	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, 12102-12108.	2.4	30
116	Synergism between melatonin and atorvastatin against endothelial cell damage induced by lipopolysaccharide. Journal of Pineal Research, 2011, 51, 324-330.	3.4	30
117	Melatonin alleviates sepsis-induced heart injury through activating the Nrf2 pathway and inhibiting the NLRP3 inflammasome. Naunyn-Schmiedeberg's Archives of Pharmacology, 2021, 394, 261-277.	1.4	30
118	Changes in iNOS activity, oxidative stress and melatonin levels in hypertensive patients treated with lacidipine. Journal of Hypertension, 2004, 22, 629-635.	0.3	29
119	Learning capabilities and CA1-prefrontal synaptic plasticity in a mice model of accelerated senescence. Neurobiology of Aging, 2012, 33, 627.e13-627.e26.	1.5	29
120	Rapamycin administration is not a valid therapeutic strategy for every case of mitochondrial disease. EBioMedicine, 2019, 42, 511-523.	2.7	29
121	Intracerebroventricular injection of naloxone blocks melatonin-dependent brain [3H]flunitrazepam binding. NeuroReport, 1993, 4, 987-990.	0.6	28
122	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.	1.7	28
123	Protective effects of melatonin against oxidative damage induced by Egyptian cobra (Naja haje) crude venom in rats. Acta Tropica, 2015, 143, 58-65.	0.9	27
124	Î²â€•<scp>RA</scp> reduces <scp>DMQ</scp> /CoQ ratio and rescues the encephalopathic phenotype in Coq9 ^{R239X} mice. EMBO Molecular Medicine, 2019, 11, .	3.3	27
125	Antioxidant defence and inflammatory response in professional road cyclists during a 4-day competition. Journal of Sports Sciences, 2010, 28, 1047-1056.	1.0	26
126	The benefits of four weeks of melatonin treatment on circadian patterns in resistance-trained athletes. Chronobiology International, 2015, 32, 1125-1134.	0.9	26

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127	Contribution of inducible and neuronal nitric oxide synthases to mitochondrial damage and melatonin rescue in LPS-treated mice. Journal of Physiology and Biochemistry, 2017, 73, 235-244.	1.3	26
128	Influence of the Pituitary-Adrenal Axis on Benzodiazepine Receptor Binding to Rat Cerebral Cortex. Neuroendocrinology, 1990, 51, 97-103.	1.2	25
129	Phenylpyrrole derivatives as neural and inducible nitric oxide synthase (nNOS and iNOS) inhibitors. European Journal of Medicinal Chemistry, 2009, 44, 2655-2666.	2.6	25
130	A phase II, single-center, double-blind, randomized placebo-controlled trial to explore the efficacy and safety of intravenous melatonin in patients with COVID-19 admitted to the intensive care unit (MelCOVID study): a structured summary of a study protocol for a randomized controlled trial. Trials, 2020, 21, 699.	0.7	25
131	Melatonin Targets Metabolism in Head and Neck Cancer Cells by Regulating Mitochondrial Structure and Function. Antioxidants, 2021, 10, 603.	2.2	24
132	Melatonin actions in the heart; more than a hormone. Melatonin Research, 2018, 1, 21-26.	0.7	24
133	Melatonin Treatment Reduces Oxidative Damage and Normalizes Plasma Pro-Inflammatory Cytokines in Patients Suffering from Charcot-Marie-Tooth Neuropathy: A Pilot Study in Three Children. Molecules, 2017, 22, 1728.	1.7	23
134	Daily Changes in the Expression of Clock Genes in Sepsis and Their Relation with Sepsis Outcome and Urinary Excretion of 6-Sulfatoximelatonin. Shock, 2020, 53, 550-559.	1.0	23
135	Synthesis and biological evaluation of indazole derivatives. European Journal of Medicinal Chemistry, 2011, 46, 1439-1447.	2.6	22
136	Identification of mitochondrial deficits and melatonin targets in liver of septic mice by high-resolution respirometry. Life Sciences, 2015, 121, 158-165.	2.0	22
137	Redox status and antioxidant response in professional cyclists during training. European Journal of Sport Science, 2014, 14, 830-838.	1.4	21
138	Environment-Sensitive Probes for Illuminating Amyloid Aggregation In Vitro and in Zebrafish. ACS Sensors, 2020, 5, 2792-2799.	4.0	21
139	Fluorination Effects on NOS Inhibitory Activity of Pyrazoles Related to Curcumin. Molecules, 2015, 20, 15643-15665.	1.7	20
140	Role of Pineal Gland in Kidney-Adrenal Homeostasis. Hormone and Metabolic Research, 1984, 16, 589-592.	0.7	19
141	Protective effects of synthetic kynurenines on 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced parkinsonism in mice. Brain Research Bulletin, 2011, 85, 133-140.	1.4	18
142	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.	0.3	18
143	Organophosphate pesticide exposure, hormone levels, and interaction with PON1 polymorphisms in male adolescents. Science of the Total Environment, 2021, 769, 144563.	3.9	18
144	Oxidative damage in the livers of senescence-accelerated mice: a gender-related response. Canadian Journal of Physiology and Pharmacology, 2006, 84, 213-220.	0.7	17

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145	Influence of aging and growth hormone on different members of the NFkB family and IkB expression in the heart from a murine model of senescence-accelerated aging. Experimental Gerontology, 2016, 73, 114-120.	1.2	17
146	Beneficial effect of melatonin treatment on age-related insulin resistance and on the development of type 2 diabetes. Hormone Molecular Biology and Clinical Investigation, 2013, 16, 47-54.	0.3	16
147	Changes in the redox status and inflammatory response in handball players during one-year of competition and training. Journal of Sports Sciences, 2013, 31, 1197-1207.	1.0	15
148	Ageâ€related changes in mitochondrial function of mouse colonic smooth muscle: beneficial effects of melatonin. Journal of Pineal Research, 2014, 56, 163-174.	3.4	15
149	Synthesis, structure and biological activity of 3(5)-trifluoromethyl-1H-pyrazoles derived from hemicurcuminoids. Journal of Molecular Structure, 2015, 1100, 518-529.	1.8	15
150	The Melatonin Analog IQM316 May Induce Adult Hippocampal Neurogenesis and Preserve Recognition Memories in Mice. Cell Transplantation, 2018, 27, 423-437.	1.2	15
151	The Impact of Melatonin and NLRP3 Inflammasome on the Expression of microRNAs in Aged Muscle. Antioxidants, 2021, 10, 524.	2.2	15
152	Î²â€globin gene cluster haplotypes in sickle cell patients from PanamÃ¡. American Journal of Human Biology, 2011, 23, 377-380.	0.8	14
153	1,3,4-Thiadiazole derivatives as selective inhibitors of iNOS versus nNOS: Synthesis and structure-activity dependence. European Journal of Medicinal Chemistry, 2012, 50, 129-139.	2.6	14
154	Prophylactic Role of Oral Melatonin Administration on Neurogenesis in Adult Balb/C Mice during REM Sleep Deprivation. Oxidative Medicine and Cellular Longevity, 2016, 2016, 1-10.	1.9	14
155	In VivoDetermination 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.	0.5	14
156	Melatonin counteracts pinealectomy-dependent decreases in rat brain [3H]flunitrazepam binding through an opioid mechanism. Neuroscience Letters, 1993, 164, 149-153.	1.0	13
157	Growth hormone can improve insulin resistance and differentiation in pancreas of senescence accelerated prone male mice (SAMP8). Growth Hormone and IGF Research, 2011, 21, 63-68.	0.5	13
158	Synthesis and biological evaluation of 4,5-dihydro-1H-pyrazole derivatives as potential nNOS/iNOS selective inhibitors. Part 2: Influence of diverse substituents in both the phenyl moiety and the acyl group. Bioorganic and Medicinal Chemistry, 2013, 21, 4132-4142.	1.4	13
159	Pinealectomy increases ouabain high-affinity binding sites and dissociation constant in rat cerebral cortex. Neuroscience Letters, 1991, 127, 227-230.	1.0	11
160	Genetic dissection of endothelial transcriptional activity of zebrafish aryl hydrocarbon receptors (AHRs). PLoS ONE, 2017, 12, e0183433.	1.1	11
161	Characterization of melatonin high-affinity binding sites in purified cell nuclei of the hamster (Mesocricetus auratus) harderian gland. Journal of Pineal Research, 2003, 34, 202-207.	3.4	10
162	Argan Oil-contained Antioxidants for Human Mitochondria. Natural Product Communications, 2013, 8, 1934578X1300800.	0.2	10

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163	Retinoid-related orphan nuclear receptor alpha (RORÎ±)-deficient mice display morphological testicular defects. Laboratory Investigation, 2019, 99, 1835-1849.	1.7	10
164	The Zebrafish, an Outstanding Model for Biomedical Research in the Field of Melatonin and Human Diseases. International Journal of Molecular Sciences, 2022, 23, 7438.	1.8	10
165	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.	1.6	9
166	Specific binding of melatonin to purified cell nuclei from mammary gland of swiss mice: dayâ€“night variations and effect of continuous light. Journal of Pineal Research, 2003, 34, 297-301.	3.4	8
167	Î²-RA Targets Mitochondrial Metabolism and Adipogenesis, Leading to Therapeutic Benefits against CoQ Deficiency and Age-Related Overweight. Biomedicines, 2021, 9, 1457.	1.4	8
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