

# DarÃ±o Acuña-castroviejo

## List of Publications by Year in descending order

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177  
papers

12,924  
citations

19477

61  
h-index

27257

107  
g-index

195  
all docs

195  
docs citations

195  
times ranked

12384  
citing authors

#	ARTICLE	IF	CITATIONS
1	Extrapineal melatonin: sources, regulation, and potential functions. Cellular and Molecular Life Sciences, 2014, 71, 2997-3025.	5.5	812
2	Extrapineal melatonin: analysis of its subcellular distribution and daily fluctuations. Journal of Pineal Research, 2012, 52, 217-227.	7.7	502
3	Melatonin mitigates mitochondrial malfunction. Journal of Pineal Research, 2005, 38, 1-9.	7.7	471
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.	7.7	465
5	Melatonin, mitochondria, and cellular bioenergetics. Journal of Pineal Research, 2001, 30, 65-74.	7.7	356
6	Melatonin, a Full Service Anti-Cancer Agent: Inhibition of Initiation, Progression and Metastasis. International Journal of Molecular Sciences, 2017, 18, 843.	4.2	353
7	Melatonin but not vitamins C and E maintains glutathione homeostasis in t-butyl hydroperoxide-induced mitochondrial oxidative stress. FASEB Journal, 2000, 14, 1677-1679.	0.5	323
8	Melatonin and mitochondrial function. Life Sciences, 2004, 75, 765-790.	4.4	293
9	Melatonin inhibits expression of the inducible NO synthase II in liver and lung and prevents endotoxemia in lipopolysaccharide-induced multiple organ dysfunction syndrome in rats. FASEB Journal, 1999, 13, 1537-1546.	0.5	265
10	Alzheimer's disease: pathological mechanisms and the beneficial role of melatonin. Journal of Pineal Research, 2012, 52, 167-202.	7.7	265
11	Melatonin stimulates the activity of the detoxifying enzyme glutathione peroxidase in several tissues of chicks. Journal of Pineal Research, 1995, 19, 111-115.	7.7	203
12	Melatonin reduces nitric oxide synthase activity in rat hypothalamus. Journal of Pineal Research, 1996, 20, 205-210.	7.7	202
13	Disruption of the NF- $\kappa$ B/NLRP3 connection by melatonin requires retinoid-related orphan receptor- $\alpha$ and blocks the septic response in mice. FASEB Journal, 2015, 29, 3863-3875.	0.5	200
14	Characterization of high-affinity melatonin binding sites in purified cell nuclei of rat liver. Journal of Pineal Research, 1994, 16, 100-112.	7.7	186
15	Melatonin counteracts lipopolysaccharide-induced expression and activity of mitochondrial nitric oxide synthase in rats. FASEB Journal, 2003, 17, 1-22.	0.5	167
16	Inhibition of neuronal nitric oxide synthase activity by N <sup>1</sup> -acetyl-5-methoxykynuramine, a brain metabolite of melatonin. Journal of Neurochemistry, 2006, 98, 2023-2033.	4.0	146
17	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.	7.7	140
18	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.	7.7	132

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19	Melatonin role in the mitochondrial function. <i>Frontiers in Bioscience - Landmark</i> , 2007, 12, 947.	3.1	131
20	Hyperphosphorylation of microtubule-associated protein tau in senescence-accelerated mouse (SAM). <i>Mechanisms of Ageing and Development</i> , 2005, 126, 1300-1304.	4.6	130
21	Melatonin counteracts inducible mitochondrial nitric oxide synthase-dependent mitochondrial dysfunction in skeletal muscle of septic mice. <i>Journal of Pineal Research</i> , 2006, 40, 71-78.	7.7	130
22	Structure-Related Inhibition of Calmodulin-Dependent Neuronal Nitric-Oxide Synthase Activity by Melatonin and Synthetic Kynurenines. <i>Molecular Pharmacology</i> , 2000, 58, 967-975.	2.3	128
23	Same molecule but different expression: aging and sepsis trigger NLRP3 inflammasome activation, a target of melatonin. <i>Journal of Pineal Research</i> , 2016, 60, 193-205.	7.7	127
24	Melatonin blunts the mitochondrial/NLRP3 connection and protects against radiation-induced oral mucositis. <i>Journal of Pineal Research</i> , 2015, 58, 34-49.	7.7	124
25	Long-term melatonin administration protects brain mitochondria from aging. <i>Journal of Pineal Research</i> , 2009, 47, 192-200.	7.7	123
26	Mitochondrial regulation by melatonin And its metabolites. <i>Advances in Experimental Medicine and Biology</i> , 2003, 527, 549-557.	0.0	123
27	Melatonin is protective against MPTP-induced striatal and hippocampal lesions. <i>Life Sciences</i> , 1996, 60, PL23-PL29.	4.4	122
28	Chronic melatonin treatment reduces the age-dependent inflammatory process in senescence-accelerated mice. <i>Journal of Pineal Research</i> , 2007, 42, 272-279.	7.7	121
29	Exercise and melatonin in humans: reciprocal benefits. <i>Journal of Pineal Research</i> , 2012, 52, 1-11.	7.7	112
30	Melatonin and its brain metabolite N <sup>1</sup> -acetyl-5-methoxykynuramine prevent mitochondrial nitric oxide synthase induction in parkinsonian mice. <i>Journal of Neuroscience Research</i> , 2009, 87, 3002-3010.	3.0	107
31	Melatonin: Potential Functions in the Oral Cavity. <i>Journal of Periodontology</i> , 2007, 78, 1094-1102.	3.6	106
32	Cellular mechanisms involved in the melatonin inhibition of HT-29 human colon cancer cell proliferation in culture. <i>Journal of Pineal Research</i> , 2007, 43, 195-205.	7.7	104
33	Identification of an inducible nitric oxide synthase in diaphragm mitochondria from septic mice: relation with mitochondrial dysfunction and prevention by melatonin. <i>International Journal of Biochemistry and Cell Biology</i> , 2006, 38, 267-278.	2.9	101
34	Chronic melatonin treatment prevents age-dependent cardiac mitochondrial dysfunction in senescence-accelerated mice. <i>Free Radical Research</i> , 2007, 41, 15-24.	3.3	99
35	Pharmacological utility of melatonin in the treatment of septic shock: experimental and clinical evidence. <i>Journal of Pharmacy and Pharmacology</i> , 2010, 58, 1153-1165.	2.6	99
36	Melatonin in Antinociception: Its Therapeutic Applications. <i>Current Neuropharmacology</i> , 2012, 10, 167-178.	3.0	97

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37	Dysfunctional Coq9 protein causes predominant encephalomyopathy associated with CoQ deficiency. <i>Human Molecular Genetics</i> , 2013, 22, 1233-1248.	3.0	93
38	Melatonin administration to wild-type mice and nontreated NLRP3 mutant mice share similar inhibition of the inflammatory response during sepsis. <i>Journal of Pineal Research</i> , 2017, 63, e12410.	7.7	90
39	Melatonin protects rats from radiotherapy-induced small intestine toxicity. <i>PLoS ONE</i> , 2017, 12, e0174474.	2.5	89
40	Improved mitochondrial function and increased life span after chronic melatonin treatment in senescent prone mice. <i>Experimental Gerontology</i> , 2008, 43, 749-756.	2.9	88
41	Mitochondrial DNA and inflammatory diseases. <i>Human Genetics</i> , 2012, 131, 161-173.	3.8	88
42	Melatonin, clock genes and mitochondria in sepsis. <i>Cellular and Molecular Life Sciences</i> , 2017, 74, 3965-3987.	5.5	88
43	Melatonin plus physical exercise are highly neuroprotective in the 3xTg-AD mouse. <i>Neurobiology of Aging</i> , 2012, 33, 1124.e13-1124.e29.	3.2	87
44	Melatonin Mitigates Mitochondrial Meltdown: Interactions with SIRT3. <i>International Journal of Molecular Sciences</i> , 2018, 19, 2439.	4.2	87
45	Melatonin enhances neural stem cell differentiation and engraftment by increasing mitochondrial function. <i>Journal of Pineal Research</i> , 2017, 63, e12415.	7.7	86
46	Diurnal Variations of Benzodiazepine Binding in Rat Cerebral Cortex: Disruption by Pinealectomy. <i>Journal of Pineal Research</i> , 1986, 3, 101-109.	7.7	85
47	The clinical heterogeneity of coenzyme Q <sub>10</sub> deficiency results from genotypic differences in the <i>Coq9</i> gene. <i>EMBO Molecular Medicine</i> , 2015, 7, 670-687.	7.3	80
48	The beneficial effects of melatonin against heart mitochondrial impairment during sepsis: inhibition of iNOS and preservation of nNOS. <i>Journal of Pineal Research</i> , 2014, 56, 71-81.	7.7	73
49	Synergistic effects of melatonin and deprenyl against MPTP-induced mitochondrial damage and DA depletion. <i>Neurobiology of Aging</i> , 2003, 24, 491-500.	3.2	72
50	Relationship Between Salivary Melatonin and Severity of Periodontal Disease. <i>Journal of Periodontology</i> , 2006, 77, 1533-1538.	3.6	71
51	Inhibition of the cdk5/p25 fragment formation may explain the antiapoptotic effects of melatonin in an experimental model of Parkinson's disease. <i>Journal of Pineal Research</i> , 2006, 40, 251-258.	7.7	69
52	Melatonin Enhances Cisplatin and Radiation Cytotoxicity in Head and Neck Squamous Cell Carcinoma by Stimulating Mitochondrial ROS Generation, Apoptosis, and Autophagy. <i>Oxidative Medicine and Cellular Longevity</i> , 2019, 2019, 1-12.	4.1	69
53	Parameters of oxidative stress in saliva from diabetic and parenteral drug addict patients. <i>Journal of Oral Pathology and Medicine</i> , 2006, 35, 554-559.	2.7	68
54	Analysis of the daily changes of melatonin receptors in the rat liver. <i>Journal of Pineal Research</i> , 2013, 54, 313-321.	7.7	67

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55	Melatonin rescues zebrafish embryos from the parkinsonian phenotype restoring the parkin/PINK1 network. Journal of Pineal Research, 2016, 61, 96-107.	7.7	67
56	Clinical trial to test the efficacy of melatonin in COVID-19. Journal of Pineal Research, 2020, 69, e12683.	7.7	65
57	4,5-Dihydro-1H-pyrazole Derivatives with Inhibitory nNOS Activity in Rat Brain: Synthesis and Structure-Activity Relationships. Journal of Medicinal Chemistry, 2004, 47, 5641-5650.	6.6	63
58	CoQ deficiency causes disruption of mitochondrial sulfide oxidation, a new pathomechanism associated with this syndrome. EMBO Molecular Medicine, 2017, 9, 78-95.	7.3	63
59	Protective Effects of Melatonin on the Skin: Future Perspectives. International Journal of Molecular Sciences, 2019, 20, 4948.	4.2	63
60	Modification of Nitric Oxide Synthase Activity and Neuronal Response in Rat Striatum by Melatonin and Kynurenine Derivatives. Journal of Neuroendocrinology, 2008, 10, 297-302.	2.6	62
61	A review of the melatonin functions in zebrafish physiology. Journal of Pineal Research, 2014, 57, 1-9.	7.7	62
62	Melatonin and metabolic regulation: a review. Food and Function, 2014, 5, 2806-2832.	4.6	60
63	Accumulation of Exogenous Amyloid- $\beta$ Peptide in Hippocampal Mitochondria Causes Their Dysfunction: A Protective Role for Melatonin. Oxidative Medicine and Cellular Longevity, 2012, 2012, 1-15.	4.1	59
64	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.	7.7	58
65	Ubiquinol-10 ameliorates mitochondrial encephalopathy associated with CoQ deficiency. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 2014, 1842, 893-901.	3.8	58
66	Identification of morphological markers of sarcopenia at early stage of aging in skeletal muscle of mice. Experimental Gerontology, 2016, 83, 22-30.	2.9	58
67	Relationship between salivary melatonin levels and periodontal status in diabetic patients. Journal of Pineal Research, 2003, 35, 239-244.	7.7	55
68	Analysis of Plasma MicroRNAs as Predictors and Biomarkers of Aging and Frailty in Humans. Oxidative Medicine and Cellular Longevity, 2018, 2018, 1-9.	4.1	55
69	Melatonin and Nitric Oxide: Two Required Antagonists for Mitochondrial Homeostasis. Endocrine, 2005, 27, 159-168.	2.2	54
70	Age-dependent lipopolysaccharide-induced iNOS expression and multiorgan failure in rats: Effects of melatonin treatment. Experimental Gerontology, 2006, 41, 1165-1173.	2.9	54
71	Local Application of Melatonin Into Alveolar Sockets of Beagle Dogs Reduces Tooth Removal-Induced Oxidative Stress. Journal of Periodontology, 2007, 78, 576-583.	3.6	54
72	The Role of Mitochondria in Brain Aging and the Effects of Melatonin. Current Neuropharmacology, 2010, 8, 182-193.	3.0	52

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73	Prefrontal cortex, caloric restriction and stress during aging: Studies on dopamine and acetylcholine release, BDNF and working memory. <i>Behavioural Brain Research</i> , 2011, 216, 136-145.	2.3	52
74	Targeting NLRP3 (Nucleotide-Binding Domain, Leucine-Richâ€‘Containing Family, Pyrin) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 707 Td (D Vascular Biology, 2018, 38, 2765-2779.	4.7	51
75	Beneficial effects of melatonin on cardiological alterations in a murine model of accelerated aging. <i>Journal of Pineal Research</i> , 2010, 49, 312-320.	7.7	50
76	Kynurenamines as Neural Nitric Oxide Synthase Inhibitors. <i>Journal of Medicinal Chemistry</i> , 2005, 48, 8174-8181.	6.6	47
77	Fluorinated indazoles as novel selective inhibitors of nitric oxide synthase (NOS): Synthesis and biological evaluation. <i>Bioorganic and Medicinal Chemistry</i> , 2009, 17, 6180-6187.	3.1	47
78	Pyrazoles and pyrazolines as neural and inducible nitric oxide synthase (nNOS and iNOS) potential inhibitors (III). <i>European Journal of Medicinal Chemistry</i> , 2008, 43, 2579-2591.	5.7	45
79	Oxidative stress status, clinical outcome, and Î²â€‘globin gene cluster haplotypes in pediatric patients with sickle cell disease. <i>European Journal of Haematology</i> , 2010, 85, 529-537.	2.2	44
80	Lack of NLRP3 Inflammasome Activation Reduces Age-Dependent Sarcopenia and Mitochondrial Dysfunction, Favoring the Prophylactic Effect of Melatonin. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2019, 74, 1699-1708.	3.7	43
81	The benefit of a supplement with the antioxidant melatonin on redox status and muscle damage in resistance-trained athletes. <i>Applied Physiology, Nutrition and Metabolism</i> , 2017, 42, 700-707.	2.1	42
82	Effect of Melatonin Supplementation on Antioxidant Status and DNA Damage in High Intensity Trained Athletes. <i>International Journal of Sports Medicine</i> , 2017, 38, 1117-1125.	1.9	42
83	Agomelatine in Depressive Disorders: Its Novel Mechanisms of Action. <i>Journal of Neuropsychiatry and Clinical Neurosciences</i> , 2012, 24, 290-308.	2.0	41
84	Melatonin protects lung mitochondria from aging. <i>Age</i> , 2012, 34, 681-692.	2.9	41
85	Day-night variations in melatonin secretion by the pineal gland during febrile and epileptic convulsions in children. <i>Psychiatry Research</i> , 1994, 52, 273-283.	3.4	40
86	Melatonin therapy in fibromyalgia. <i>Current Pain and Headache Reports</i> , 2007, 11, 339-342.	2.9	39
87	Oral Mucositis: Melatonin Gel an Effective New Treatment. <i>International Journal of Molecular Sciences</i> , 2017, 18, 1003.	4.2	39
88	Melatonin concentration in the umbilical artery and vein in human preterm and term neonates and neonates with acute fetal distress. <i>Journal of Pineal Research</i> , 1992, 13, 184-191.	7.7	37
89	Melatonin reduces oxidative stress in erythrocytes and plasma of senescence-accelerated mice. <i>Journal of Pineal Research</i> , 2006, 41, 142-149.	7.7	37
90	Melatonin treatment counteracts the hyperoxidative status in erythrocytes of patients suffering from Duchenne muscular dystrophy. <i>Clinical Biochemistry</i> , 2011, 44, 853-858.	2.0	37

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91	Age-related changes in the rat brain mitochondrial antioxidative enzyme ratios: Modulation by melatonin. <i>Experimental Gerontology</i> , 2012, 47, 706-711.	2.9	37
92	Involvement of plasma miRNAs, muscle miRNAs and mitochondrial miRNAs in the pathophysiology of frailty. <i>Experimental Gerontology</i> , 2019, 124, 110637.	2.9	37
93	Melatonin/Nrf2/NLRP3 Connection in Mouse Heart Mitochondria during Aging. <i>Antioxidants</i> , 2020, 9, 1187.	5.2	36
94	Melatonin drives apoptosis in head and neck cancer by increasing mitochondrial ROS generated via reverse electron transport. <i>Journal of Pineal Research</i> , 2022, 73, .	7.7	35
95	The Protective Effect of Melatonin Against Age-Associated, Sarcopenia-Dependent Tubular Aggregate Formation, Lactate Depletion, and Mitochondrial Changes. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2018, 73, 1330-1338.	3.7	34
96	Î²â€•RA</scp> reduces <scp>DMQ</scp> /CoQ ratio and rescues the encephalopathic phenotype in <i>Coq9</i> <sup><i>R239X</i></sup> mice. <i>EMBO Molecular Medicine</i> , 2019, 11, .	7.3	34
97	Melatonin alleviates sepsis-induced heart injury through activating the Nrf2 pathway and inhibiting the NLRP3 inflammasome. <i>Naunyn-Schmiedeberg's Archives of Pharmacology</i> , 2021, 394, 261-277.	3.1	34
98	Mitochondrial impairment and melatonin protection in parkinsonian mice do not depend of inducible or neuronal nitric oxide synthases. <i>PLoS ONE</i> , 2017, 12, e0183090.	2.5	34
99	Synergism between melatonin and atorvastatin against endothelial cell damage induced by lipopolysaccharide. <i>Journal of Pineal Research</i> , 2011, 51, 324-330.	7.7	33
100	Permeabilized myocardial fibers as model to detect mitochondrial dysfunction during sepsis and melatonin effects without disruption of mitochondrial network. <i>Mitochondrion</i> , 2016, 27, 56-63.	3.6	31
101	Rapamycin administration is not a valid therapeutic strategy for every case of mitochondrial disease. <i>EBioMedicine</i> , 2019, 42, 511-523.	6.0	31
102	Inhibition of nNOS Activity in Rat Brain by Synthetic Kynurenines:â€‰ Structureâ€™ Activity Dependence. <i>Journal of Medicinal Chemistry</i> , 2002, 45, 263-274.	6.6	30
103	Selective CCK-A but not CCK-B receptor antagonists inhibit HT-29 cell proliferation: synergism with pharmacological levels of melatonin. <i>Journal of Pineal Research</i> , 2005, 39, 243-250.	7.7	30
104	Determination of Coenzyme Q<sub>10</sub>, Coenzyme Q<sub>9</sub>, and Melatonin Contents in Virgin Argan Oils: Comparison with Other Edible Vegetable Oils. <i>Journal of Agricultural and Food Chemistry</i> , 2011, 59, 12102-12108.	5.3	30
105	Changes in iNOS activity, oxidative stress and melatonin levels in hypertensive patients treated with lacidipine. <i>Journal of Hypertension</i> , 2004, 22, 629-635.	0.5	29
106	Learning capabilities and CA1-prefrontal synaptic plasticity in a mice model of accelerated senescence. <i>Neurobiology of Aging</i> , 2012, 33, 627.e13-627.e26.	3.2	29
107	Intracerebroventricular injection of naloxone blocks melatonin-dependent brain [3H]flunitrazepam binding. <i>NeuroReport</i> , 1993, 4, 987-990.	1.2	28
108	Antioxidant defence and inflammatory response in professional road cyclists during a 4-day competition. <i>Journal of Sports Sciences</i> , 2010, 28, 1047-1056.	2.0	27

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109	Protective effects of melatonin against oxidative damage induced by Egyptian cobra ( <i>Naja haje</i> ) crude venom in rats. <i>Acta Tropica</i> , 2015, 143, 58-65.	2.0	27
110	Melatonin actions in the heart; more than a hormone. <i>Melatonin Research</i> , 2018, 1, 21-26.	1.1	27
111	Contribution of inducible and neuronal nitric oxide synthases to mitochondrial damage and melatonin rescue in LPS-treated mice. <i>Journal of Physiology and Biochemistry</i> , 2017, 73, 235-244.	3.1	26
112	Understanding the Mechanism of Action of Melatonin, Which Induces ROS Production in Cancer Cells. <i>Antioxidants</i> , 2022, 11, 1621.	5.2	26
113	Phenylpyrrole derivatives as neural and inducible nitric oxide synthase (nNOS and iNOS) inhibitors. <i>European Journal of Medicinal Chemistry</i> , 2009, 44, 2655-2666.	5.7	25
114	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. <i>Molecules</i> , 2017, 22, 1728.	3.9	25
115	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. <i>Trials</i> , 2020, 21, 699.	1.7	25
116	Melatonin Targets Metabolism in Head and Neck Cancer Cells by Regulating Mitochondrial Structure and Function. <i>Antioxidants</i> , 2021, 10, 603.	5.2	25
117	Daily Changes in the Expression of Clock Genes in Sepsis and Their Relation with Sepsis Outcome and Urinary Excretion of 6-Sulfatoxymelatonin. <i>Shock</i> , 2020, 53, 550-559.	2.1	24
118	Identification of mitochondrial deficits and melatonin targets in liver of septic mice by high-resolution respirometry. <i>Life Sciences</i> , 2015, 121, 158-165.	4.4	23
119	Synthesis and biological evaluation of indazole derivatives. <i>European Journal of Medicinal Chemistry</i> , 2011, 46, 1439-1447.	5.7	22
120	Environment-Sensitive Probes for Illuminating Amyloid Aggregation <i>in Vitro</i> and in Zebrafish. <i>ACS Sensors</i> , 2020, 5, 2792-2799.	8.1	22
121	Redox status and antioxidant response in professional cyclists during training. <i>European Journal of Sport Science</i> , 2014, 14, 830-838.	2.6	21
122	Fluorination Effects on NOS Inhibitory Activity of Pyrazoles Related to Curcumin. <i>Molecules</i> , 2015, 20, 15643-15665.	3.9	20
123	Organophosphate pesticide exposure, hormone levels, and interaction with PON1 polymorphisms in male adolescents. <i>Science of the Total Environment</i> , 2021, 769, 144563.	8.2	20
124	The Melatonin Analog IQM316 May Induce Adult Hippocampal Neurogenesis and Preserve Recognition Memories in Mice. <i>Cell Transplantation</i> , 2018, 27, 423-437.	2.6	19
125	Protective effects of synthetic kynurenines on 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced parkinsonism in mice. <i>Brain Research Bulletin</i> , 2011, 85, 133-140.	3.1	18
126	Early gender differences in the redox status of the brain mitochondria with age: effects of melatonin therapy. <i>Hormone Molecular Biology and Clinical Investigation</i> , 2013, 16, 91-100.	0.8	18



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127	Oxidative damage in the livers of senescence-accelerated mice: a gender-related response. <i>Canadian Journal of Physiology and Pharmacology</i> , 2006, 84, 213-220.	1.5	17
128	Changes in the redox status and inflammatory response in handball players during one-year of competition and training. <i>Journal of Sports Sciences</i> , 2013, 31, 1197-1207.	2.0	17
129	The Impact of Melatonin and NLRP3 Inflammasome on the Expression of microRNAs in Aged Muscle. <i>Antioxidants</i> , 2021, 10, 524.	5.2	17
130	Beneficial effect of melatonin treatment on age-related insulin resistance and on the development of type 2 diabetes. <i>Hormone Molecular Biology and Clinical Investigation</i> , 2013, 16, 47-54.	0.8	16
131	Synthesis, structure and biological activity of 3(5)-trifluoromethyl-1H-pyrazoles derived from hemicurcuminoids. <i>Journal of Molecular Structure</i> , 2015, 1100, 518-529.	3.7	16
132	Age-related changes in mitochondrial function of mouse colonic smooth muscle: beneficial effects of melatonin. <i>Journal of Pineal Research</i> , 2014, 56, 163-174.	7.7	15
133	β-globin gene cluster haplotypes in sickle cell patients from Panamá. <i>American Journal of Human Biology</i> , 2011, 23, 377-380.	1.7	14
134	1,3,4-Thiadiazole derivatives as selective inhibitors of iNOS versus nNOS: Synthesis and structure-activity dependence. <i>European Journal of Medicinal Chemistry</i> , 2012, 50, 129-139.	5.7	14
135	Prophylactic Role of Oral Melatonin Administration on Neurogenesis in Adult Balb/C Mice during REM Sleep Deprivation. <i>Oxidative Medicine and Cellular Longevity</i> , 2016, 2016, 1-10.	4.1	14
136	<i>In Vivo</i> 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. <i>Zebrafish</i> , 2018, 15, 15-26.	1.2	14
137	Melatonin counteracts pinealectomy-dependent decreases in rat brain [3H]flunitrazepam binding through an opioid mechanism. <i>Neuroscience Letters</i> , 1993, 164, 149-153.	2.1	13
138	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. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 4132-4142.	3.1	13
139	The Zebrafish, an Outstanding Model for Biomedical Research in the Field of Melatonin and Human Diseases. <i>International Journal of Molecular Sciences</i> , 2022, 23, 7438.	4.2	13
140	Genetic dissection of endothelial transcriptional activity of zebrafish aryl hydrocarbon receptors (AHRs). <i>PLoS ONE</i> , 2017, 12, e0183433.	2.5	12
141	Retinoid-related orphan nuclear receptor alpha (RORα)-deficient mice display morphological testicular defects. <i>Laboratory Investigation</i> , 2019, 99, 1835-1849.	3.9	12
142	β-RA Targets Mitochondrial Metabolism and Adipogenesis, Leading to Therapeutic Benefits against CoQ Deficiency and Age-Related Overweight. <i>Biomedicines</i> , 2021, 9, 1457.	3.3	11
143	Role of Melatonin in Cancer: Effect on Clock Genes. <i>International Journal of Molecular Sciences</i> , 2023, 24, 1919.	4.2	11
144	Characterization of melatonin high-affinity binding sites in purified cell nuclei of the hamster ( <i>Mesocricetus auratus</i> ) Harderian gland. <i>Journal of Pineal Research</i> , 2003, 34, 202-207.	7.7	10

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145	Argan Oil-contained Antioxidants for Human Mitochondria. <i>Natural Product Communications</i> , 2013, 8, 1934578X1300800.	0.5	10
146	Reduction in the levels of CoQ biosynthetic proteins is related to an increase in lifespan without evidence of hepatic mitohormesis. <i>Scientific Reports</i> , 2018, 8, 14013.	3.4	9
147	The Impact of Melatonin Supplementation and NLRP3 Inflammasome Deletion on Age-Accompanied Cardiac Damage. <i>Antioxidants</i> , 2021, 10, 1269.	5.2	9
148	Age and Chronodisruption in Mouse Heart: Effect of the NLRP3 Inflammasome and Melatonin Therapy. <i>International Journal of Molecular Sciences</i> , 2022, 23, 6846.	4.2	9
149	Specific binding of melatonin to purified cell nuclei from mammary gland of swiss mice: dayâ€“night variations and effect of continuous light. <i>Journal of Pineal Research</i> , 2003, 34, 297-301.	7.7	8
150	Suppressive effect of simultaneous injection of ACTH1â€“10 and Î²-endorphin on brain [3H]flunitrazepam binding. <i>NeuroReport</i> , 1993, 5, 252-254.	1.2	7
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