Dario Acua-Castroviejo

List of Publications by Citations

179 papers	11,271 citations	60 h-index	100 g-index
189 ext. papers	12,496 ext. citations	5.9 avg, IF	5.97 L-index

#	Paper	IF	Citations
179	Extrapineal melatonin: sources, regulation, and potential functions. *Cellular and Molecular Life Sciences*, **2014**, 71, 2997-3025	10.3	562
178	Melatonin mitigates mitochondrial malfunction. *Journal of Pineal Research*, **2005**, 38, 1-9	10.4	418
177	Extrapineal melatonin: analysis of its subcellular distribution and daily fluctuations. *Journal of Pineal Research*, **2012**, 52, 217-27	10.4	381
176	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, 127-38	10.4	345
175	Melatonin, mitochondria, and cellular bioenergetics. *Journal of Pineal Research*, **2001**, 30, 65-74	10.4	302
174	Melatonin but not vitamins C and E maintains glutathione homeostasis in t-butyl hydroperoxide-induced mitochondrial oxidative stress. *FASEB Journal*, **2000**, 14, 1677-9	0.9	277
173	Free Radical-Mediated Molecular Damage. *Annals of the New York Academy of Sciences*, **2006**, 939, 200-265	6.5	265
172	Melatonin and mitochondrial function. *Life Sciences*, **2004**, 75, 765-90	6.8	231
171	Melatonin, a Full Service Anti-Cancer Agent: Inhibition of Initiation, Progression and Metastasis. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	230
170	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	0.9	230
169	Alzheimer's disease: pathological mechanisms and the beneficial role of melatonin. *Journal of Pineal Research*, **2012**, 52, 167-202	10.4	217
168	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, 348-57	5.6	190
167	Melatonin stimulates the activity of the detoxifying enzyme glutathione peroxidase in several tissues of chicks. *Journal of Pineal Research*, **1995**, 19, 111-5	10.4	187
166	Melatonin-mitochondria interplay in health and disease. *Current Topics in Medicinal Chemistry*, **2011**, 11, 221-40	3	179
165	Melatonin reduces nitric oxide synthase activity in rat hypothalamus. *Journal of Pineal Research*, **1996**, 20, 205-10	10.4	179
164	Reactive oxygen intermediates, molecular damage, and aging. Relation to melatonin. *Annals of the New York Academy of Sciences*, **1998**, 854, 410-24	6.5	167
163	Characterization of high-affinity melatonin binding sites in purified cell nuclei of rat liver. *Journal of Pineal Research*, **1994**, 16, 100-12	10.4	167

162	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	10.4	154
161	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
160	Melatonin counteracts lipopolysaccharide-induced expression and activity of mitochondrial nitric oxide synthase in rats. *FASEB Journal*, **2003**, 17, 932-4	0.9	136
159	Melatonin, mitochondrial homeostasis and mitochondrial-related diseases. *Current Topics in Medicinal Chemistry*, **2002**, 2, 133-51	3	123
158	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
157	Hyperphosphorylation of microtubule-associated protein tau in senescence-accelerated mouse (SAM). *Mechanisms of Ageing and Development*, **2005**, 126, 1300-4	5.6	116
156	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
155	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
154	Structure-related inhibition of calmodulin-dependent neuronal nitric-oxide synthase activity by melatonin and synthetic kynurenines. *Molecular Pharmacology*, **2000**, 58, 967-75	4.3	111
153	Melatonin role in the mitochondrial function. *Frontiers in Bioscience - Landmark*, **2007**, 12, 947-63	2.8	111
152	Long-term melatonin administration protects brain mitochondria from aging. *Journal of Pineal Research*, **2009**, 47, 192-200	10.4	108
151	Attenuation of cardiac mitochondrial dysfunction by melatonin in septic mice. *FEBS Journal*, **2007**, 274, 2135-47	5.7	103
150	Chronic melatonin treatment reduces the age-dependent inflammatory process in senescence-accelerated mice. *Journal of Pineal Research*, **2007**, 42, 272-9	10.4	102
149	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
148	Mitochondrial regulation by melatonin and its metabolites. *Advances in Experimental Medicine and Biology*, **2003**, 527, 549-57	3.6	100
147	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
146	Melatonin blunts the mitochondrial/NLRP3 connection and protects against radiation-induced oral mucositis. *Journal of Pineal Research*, **2015**, 58, 34-49	10.4	97
145	Circadian rhythms of dopamine and dihydroxyphenyl acetic acid in the mouse striatum: effects of pinealectomy and of melatonin treatment. *Neuroendocrinology*, **2002**, 75, 201-8	5.6	97

144	Melatonin is protective against MPTP-induced striatal and hippocampal lesions. *Life Sciences*, **1997**, 60, PL23-9	6.8	93
143	Melatonin: potential functions in the oral cavity. *Journal of Periodontology*, **2007**, 78, 1094-102	4.6	89
142	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
141	Exercise and melatonin in humans: reciprocal benefits. *Journal of Pineal Research*, **2012**, 52, 1-11	10.4	87
140	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
139	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
138	Melatonin's role as an anticonvulsant and neuronal protector: experimental and clinical evidence. *Journal of Child Neurology*, **1998**, 13, 501-9	2.5	83
137	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
136	Melatonin in antinociception: its therapeutic applications. *Current Neuropharmacology*, **2012**, 10, 167-78	7.6	79
135	Diurnal variations of benzodiazepine binding in rat cerebral cortex: disruption by pinealectomy. *Journal of Pineal Research*, **1986**, 3, 101-9	10.4	79
134	Improved mitochondrial function and increased life span after chronic melatonin treatment in senescent prone mice. *Experimental Gerontology*, **2008**, 43, 749-56	4.5	78
133	Chronic melatonin treatment prevents age-dependent cardiac mitochondrial dysfunction in senescence-accelerated mice. *Free Radical Research*, **2007**, 41, 15-24	4	78
132	Mitochondrial DNA and inflammatory diseases. *Human Genetics*, **2012**, 131, 161-73	6.3	75
131	Dysfunctional Coq9 protein causes predominant encephalomyopathy associated with CoQ deficiency. *Human Molecular Genetics*, **2013**, 22, 1233-48	5.6	72
130	Prophylactic actions of melatonin in oxidative neurotoxicity. *Annals of the New York Academy of Sciences*, **1997**, 825, 70-8	6.5	72
129	Calreticulin-melatonin. An unexpected relationship. *FEBS Journal*, **2003**, 270, 832-40		71
128	Melatonin protects rats from radiotherapy-induced small intestine toxicity. *PLoS ONE*, **2017**, 12, e0174474	3.7	68
127	Melatonin plus physical exercise are highly neuroprotective in the 3xTg-AD mouse. *Neurobiology of Aging*, **2012**, 33, 1124.e13-29	5.6	67

126	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
125	Synergistic effects of melatonin and deprenyl against MPTP-induced mitochondrial damage and DA depletion. *Neurobiology of Aging*, **2003**, 24, 491-500	5.6	65
124	Melatonin increases following convulsive seizures may be related to its anticonvulsant properties at physiological concentrations. *Neuropediatrics*, **2007**, 38, 122-5	1.6	63
123	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
122	Parameters of oxidative stress in saliva from diabetic and parenteral drug addict patients. *Journal of Oral Pathology and Medicine*, **2006**, 35, 554-9	3.3	62
121	The clinical heterogeneity of coenzyme Q10 deficiency results from genotypic differences in the Coq9 gene. *EMBO Molecular Medicine*, **2015**, 7, 670-87	12	60
120	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, 251-8	10.4	60
119	4,5-dihydro-1H-pyrazole derivatives with inhibitory nNOS activity in rat brain: synthesis and structure-activity relationships. *Journal of Medicinal Chemistry*, **2004**, 47, 5641-50	8.3	59
118	Melatonin, clock genes and mitochondria in sepsis. *Cellular and Molecular Life Sciences*, **2017**, 74, 3965-3987	10.3	56
117	Melatonin Mitigates Mitochondrial Meltdown: Interactions with SIRT3. *International Journal of Molecular Sciences*, **2018**, 19,	6.3	55
116	Relationship between salivary melatonin and severity of periodontal disease. *Journal of Periodontology*, **2006**, 77, 1533-8	4.6	54
115	Modification of nitric oxide synthase activity and neuronal response in rat striatum by melatonin and kynurenine derivatives. *Journal of Neuroendocrinology*, **1998**, 10, 297-302	3.8	50
114	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
113	Melatonin reduces membrane rigidity and oxidative damage in the brain of SAMP8 mice. *Neurobiology of Aging*, **2011**, 32, 2045-54	5.6	49
112	Melatonin enhances neural stem cell differentiation and engraftment by increasing mitochondrial function. *Journal of Pineal Research*, **2017**, 63, e12415	10.4	48
111	Age-dependent lipopolysaccharide-induced iNOS expression and multiorgan failure in rats: effects of melatonin treatment. *Experimental Gerontology*, **2006**, 41, 1165-73	4.5	48
110	Melatonin and nitric oxide: two required antagonists for mitochondrial homeostasis. *Endocrine*, **2005**, 27, 159-68		48
109	CoQ deficiency causes disruption of mitochondrial sulfide oxidation, a new pathomechanism associated with this syndrome. *EMBO Molecular Medicine*, **2017**, 9, 78-95	12	47

108	Analysis of the daily changes of melatonin receptors in the rat liver. *Journal of Pineal Research*, **2013**, 54, 313-21	10.4	47
107	Relationship between salivary melatonin levels and periodontal status in diabetic patients. *Journal of Pineal Research*, **2003**, 35, 239-44	10.4	47
106	A review of the melatonin functions in zebrafish physiology. *Journal of Pineal Research*, **2014**, 57, 1-9	10.4	46
105	Kynurenamines as neural nitric oxide synthase inhibitors. *Journal of Medicinal Chemistry*, **2005**, 48, 8174-81	6.3	45
104	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	10.4	45
103	Ubiquinol-10 ameliorates mitochondrial encephalopathy associated with CoQ deficiency. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2014**, 1842, 893-901	6.9	44
102	Accumulation of exogenous amyloid-beta peptide in hippocampal mitochondria causes their dysfunction: a protective role for melatonin. *Oxidative Medicine and Cellular Longevity*, **2012**, 2012, 843649	6.7	43
101	The role of mitochondria in brain aging and the effects of melatonin. *Current Neuropharmacology*, **2010**, 8, 182-93	7.6	43
100	Local application of melatonin into alveolar sockets of beagle dogs reduces tooth removal-induced oxidative stress. *Journal of Periodontology*, **2007**, 78, 576-83	4.6	43
99	Melatonin in the oral cavity: physiological and pathological implications. *Journal of Periodontal Research*, **2015**, 50, 9-17	4.3	42
98	Melatonin and metabolic regulation: a review. *Food and Function*, **2014**, 5, 2806-32	6.1	42
97	Prefrontal cortex, caloric restriction and stress during aging: studies on dopamine and acetylcholine release, BDNF and working memory. *Behavioural Brain Research*, **2011**, 216, 136-45	3.4	42
96	Beneficial effects of melatonin on cardiological alterations in a murine model of accelerated aging. *Journal of Pineal Research*, **2010**, 49, 312-20	10.4	42
95	Clinical trial to test the efficacy of melatonin in COVID-19. *Journal of Pineal Research*, **2020**, 69, e12683	10.4	42
94	Fluorinated indazoles as novel selective inhibitors of nitric oxide synthase (NOS): synthesis and biological evaluation. *Bioorganic and Medicinal Chemistry*, **2009**, 17, 6180-7	3.4	41
93	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
92	Day-night variations in melatonin secretion by the pineal gland during febrile and epileptic convulsions in children. *Psychiatry Research*, **1994**, 52, 273-83	9.9	38
91	Pyrazoles and pyrazolines as neural and inducible nitric oxide synthase (nNOS and iNOS) potential inhibitors (III). *European Journal of Medicinal Chemistry*, **2008**, 43, 2579-91	6.8	37

90	Melatonin restores the mitochondrial production of ATP in septic mice. *Neuroendocrinology Letters*, **2006**, 27, 623-30	0.3	36
89	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
88	Melatonin protects lung mitochondria from aging. *Age*, **2012**, 34, 681-92		34
87	Analysis of Plasma MicroRNAs as Predictors and Biomarkers of Aging and Frailty in Humans. *Oxidative Medicine and Cellular Longevity*, **2018**, 2018, 7671850	6.7	33
86	Agomelatine in depressive disorders: its novel mechanisms of action. *Journal of Neuropsychiatry and Clinical Neurosciences*, **2012**, 24, 290-308	2.7	33
85	Melatonin therapy in fibromyalgia. *Current Pain and Headache Reports*, **2007**, 11, 339-42	4.2	33
84	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, 184-91	10.4	33
83	Targeting NLRP3 (Nucleotide-Binding Domain, Leucine-Rich-Containing Family, Pyrin Domain-Containing-3) Inflammasome in Cardiovascular Disorders. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2018**, 38, 2765-2779	9.4	33
82	Melatonin treatment counteracts the hyperoxidative status in erythrocytes of patients suffering from Duchenne muscular dystrophy. *Clinical Biochemistry*, **2011**, 44, 853-8	3.5	31
81	Melatonin reduces oxidative stress in erythrocytes and plasma of senescence-accelerated mice. *Journal of Pineal Research*, **2006**, 41, 142-9	10.4	30
80	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
79	Inhibition of nNOS activity in rat brain by synthetic kynurenines: structure-activity dependence. *Journal of Medicinal Chemistry*, **2002**, 45, 263-74	8.3	29
78	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
77	Learning capabilities and CA1-prefrontal synaptic plasticity in a mice model of accelerated senescence. *Neurobiology of Aging*, **2012**, 33, 627.e13-26	5.6	28
76	Melatonin therapy in fibromyalgia. *Journal of Pineal Research*, **2006**, 40, 98-9	10.4	28
75	Age-related changes in the rat brain mitochondrial antioxidative enzyme ratios: modulation by melatonin. *Experimental Gerontology*, **2012**, 47, 706-11	4.5	27
74	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
73	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, 243-50	10.4	27

72	Intracerebroventricular injection of naloxone blocks melatonin-dependent brain [3H]flunitrazepam binding. *NeuroReport*, **1993**, 4, 987-90	1.7	26
71	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
70	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	3	25
69	Protective Effects of Melatonin on the Skin: Future Perspectives. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	25
68	Oral Mucositis: Melatonin Gel an Effective New Treatment. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	25
67	Phenylpyrrole derivatives as neural and inducible nitric oxide synthase (nNOS and iNOS) inhibitors. *European Journal of Medicinal Chemistry*, **2009**, 44, 2655-66	6.8	25
66	Changes in iNOS activity, oxidative stress and melatonin levels in hypertensive patients treated with lacidipine. *Journal of Hypertension*, **2004**, 22, 629-35	1.9	25
65	Influence of the pituitary-adrenal axis on benzodiazepine receptor binding to rat cerebral cortex. *Neuroendocrinology*, **1990**, 51, 97-103	5.6	25
64	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
63	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
62	Effect of Melatonin Supplementation on Antioxidant Status and DNA Damage in High Intensity Trained Athletes. *International Journal of Sports Medicine*, **2017**, 38, 1117-1125	3.6	24
61	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	5	23
60	Synergism between melatonin and atorvastatin against endothelial cell damage induced by lipopolysaccharide. *Journal of Pineal Research*, **2011**, 51, 324-30	10.4	23
59	Antioxidant defence and inflammatory response in professional road cyclists during a 4-day competition. *Journal of Sports Sciences*, **2010**, 28, 1047-56	3.6	22
58	Impact of Daylight Saving Time on circadian timing system: An expert statement. *European Journal of Internal Medicine*, **2019**, 60, 1-3	3.9	22
57	The benefits of four weeks of melatonin treatment on circadian patterns in resistance-trained athletes. *Chronobiology International*, **2015**, 32, 1125-34	3.6	20
56	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
55	Redox status and antioxidant response in professional cyclists during training. *European Journal of Sport Science*, **2014**, 14, 830-8	3.9	19

54	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,	4.8	19
53	Synthesis and biological evaluation of indazole derivatives. *European Journal of Medicinal Chemistry* , **2011**, 46, 1439-47	6.8	19
52	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
51	Role of pineal gland in kidney-adrenal homeostasis. *Hormone and Metabolic Research*, **1984**, 16, 589-92	3.1	18
50	ERA reduces DMQ/CoQ ratio and rescues the encephalopathic phenotype in mice. *EMBO Molecular Medicine*, **2019**, 11,	12	18
49	Rapamycin administration is not a valid therapeutic strategy for every case of mitochondrial disease. *EBioMedicine*, **2019**, 42, 511-523	8.8	17
48	Fluorination Effects on NOS Inhibitory Activity of Pyrazoles Related to Curcumin. *Molecules*, **2015**, 20, 15643-65	4.8	17
47	Melatonin actions in the heart; more than a hormone. *Melatonin Research*, **2018**, 1, 21-26	5.1	17
46	Melatonin/Nrf2/NLRP3 Connection in Mouse Heart Mitochondria during Aging. *Antioxidants*, **2020**, 9,	7.1	17
45	Oxidative damage in the livers of senescence-accelerated mice: a gender-related response. *Canadian Journal of Physiology and Pharmacology*, **2006**, 84, 213-20	2.4	16
44	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	2.8	16
43	Involvement of plasma miRNAs, muscle miRNAs and mitochondrial miRNAs in the pathophysiology of frailty. *Experimental Gerontology*, **2019**, 124, 110637	4.5	15
42	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, 114-20	4.5	15
41	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
40	Age-related changes in mitochondrial function of mouse colonic smooth muscle: beneficial effects of melatonin. *Journal of Pineal Research*, **2014**, 56, 163-74	10.4	14
39	Synthesis, structure and biological activity of 3(5)-trifluoromethyl-1H-pyrazoles derived from hemicurcuminoids. *Journal of Molecular Structure*, **2015**, 1100, 518-529	3.4	13
38	1,3,4-Thiadiazole derivatives as selective inhibitors of iNOS versus nNOS: Synthesis and structure-activity dependence. *European Journal of Medicinal Chemistry*, **2012**, 50, 129-39	6.8	13
37	Changes in the redox status and inflammatory response in handball players during one-year of competition and training. *Journal of Sports Sciences*, **2013**, 31, 1197-207	3.6	13

36	Melatonin counteracts pinealectomy-dependent decreases in rat brain [3H]flunitrazepam binding through an opioid mechanism. *Neuroscience Letters*, **1993**, 164, 149-53	3.3	13
35	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	3.4	13
34	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, 4132-42	3.4	12
33	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
32	Environment-Sensitive Probes for Illuminating Amyloid Aggregation and in Zebrafish. *ACS Sensors*, **2020**, 5, 2792-2799	9.2	11
31	-globin gene cluster haplotypes in sickle cell patients from Panam *American Journal of Human Biology*, **2011**, 23, 377-80	2.7	11
30	Pinealectomy increases ouabain high-affinity binding sites and dissociation constant in rat cerebral cortex. *Neuroscience Letters*, **1991**, 127, 227-30	3.3	11
29	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
28	The Melatonin Analog IQM316 May Induce Adult Hippocampal Neurogenesis and Preserve Recognition Memories in Mice. *Cell Transplantation*, **2018**, 27, 423-437	4	10
27	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	1.3	10
26	Growth hormone can improve insulin resistance and differentiation in pancreas of senescence accelerated prone male mice (SAMP8). *Growth Hormone and IGF Research*, **2011**, 21, 63-8	2	10
25	Characterization of melatonin high-affinity binding sites in purified cell nuclei of the hamster (Mesocricetus auratus) harderian gland. *Journal of Pineal Research*, **2003**, 34, 202-7	10.4	9
24	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	3.4	8
23	Specific binding of melatonin to purified cell nuclei from mammary gland of swiss mice: day-night variations and effect of continuous light. *Journal of Pineal Research*, **2003**, 34, 297-301	10.4	7
22	Suppressive effect of simultaneous injection of ACTH1-10 and beta-endorphin on brain [3H]flunitrazepam binding. *NeuroReport*, **1993**, 5, 252-4	1.7	7
21	Prophylactic Role of Oral Melatonin Administration on Neurogenesis in Adult Balb/C Mice during REM Sleep Deprivation. *Oxidative Medicine and Cellular Longevity*, **2016**, 2016, 2136902	6.7	7
20	Genetic dissection of endothelial transcriptional activity of zebrafish aryl hydrocarbon receptors (AHRs). *PLoS ONE*, **2017**, 12, e0183433	3.7	6
19	Melatonin Targets Metabolism in Head and Neck Cancer Cells by Regulating Mitochondrial Structure and Function. *Antioxidants*, **2021**, 10,	7.1	6

18	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
17	Retinoid-related orphan nuclear receptor alpha (RORα)-deficient mice display morphological testicular defects. *Laboratory Investigation*, **2019**, 99, 1835-1849	5.9	5
16	Argan Oil-contained Antioxidants for Human Mitochondria. *Natural Product Communications*, **2013**, 8, 1934578X1300800	0.9	5
15	Organophosphate pesticide exposure, hormone levels, and interaction with PON1 polymorphisms in male adolescents. *Science of the Total Environment*, **2021**, 769, 144563	10.2	5
14	The Impact of Melatonin and NLRP3 Inflammasome on the Expression of microRNAs in Aged Muscle. *Antioxidants*, **2021**, 10,	7.1	5
13	Cardiometabolic impact of changing internal time during daylight saving time: a window for a deleterious role within sleep-related breathing disorders. *Internal and Emergency Medicine*, **2018**, 13, 1345-1346	3.7	5
12	A new guest playing with bone and fat. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2007**, 292, R2206-7	3.2	4
11	Evaluation of plasma levels of melatonin after midazolam or sodium thiopental anesthesia in children. *Journal of Pineal Research*, **2002**, 32, 253-6	10.4	4
10	Lack of retinoid acid receptor-related orphan receptor alpha accelerates and melatonin supplementation prevents testicular aging. *Aging*, **2020**, 12, 12648-12668	5.6	4
9	Effects of some synthetic kynurenines on brain amino acids and nitric oxide after pentylenetetrazole administration to rats. *Journal of Pineal Research*, **2004**, 36, 267-77	10.4	3
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