

Dun-Xian Tan

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211
papers

27,877
citations

97
h-index

164
g-index

216
ext. papers

30,930
ext. citations

6.4
avg, IF

7.13
L-index

#	Paper	IF	Citations
211	One molecule, many derivatives: a never-ending interaction of melatonin with reactive oxygen and nitrogen species?. <i>Journal of Pineal Research</i> , 2007 , 42, 28-42	10.4	1160
210	Actions of melatonin in the reduction of oxidative stress. A review. <i>Journal of Biomedical Science</i> , 2000 , 7, 444-58	13.3	788
209	Melatonin as an antioxidant: under promises but over delivers. <i>Journal of Pineal Research</i> , 2016 , 61, 253-78.4	7.4	786
208	Chemical and physical properties and potential mechanisms: melatonin as a broad spectrum antioxidant and free radical scavenger. <i>Current Topics in Medicinal Chemistry</i> , 2002 , 2, 181-97	3	777
207	Melatonin: an ancient molecule that makes oxygen metabolically tolerable. <i>Journal of Pineal Research</i> , 2015 , 59, 403-19	10.4	595
206	Extrapineal melatonin: sources, regulation, and potential functions. <i>Cellular and Molecular Life Sciences</i> , 2014 , 71, 2997-3025	10.3	562
205	Biochemical reactivity of melatonin with reactive oxygen and nitrogen species: a review of the evidence. <i>Cell Biochemistry and Biophysics</i> , 2001 , 34, 237-56	3.2	504
204	Melatonin: a multitasking molecule. <i>Progress in Brain Research</i> , 2010 , 181, 127-51	2.9	432
203	Melatonin mitigates mitochondrial malfunction. <i>Journal of Pineal Research</i> , 2005 , 38, 1-9	10.4	418
202	Melatonin, hydroxyl radical-mediated oxidative damage, and aging: a hypothesis. <i>Journal of Pineal Research</i> , 1993 , 14, 151-68	10.4	405
201	Functional roles of melatonin in plants, and perspectives in nutritional and agricultural science. <i>Journal of Experimental Botany</i> , 2012 , 63, 577-97	7	392
200	Significance of melatonin in antioxidative defense system: reactions and products. <i>NeuroSignals</i> , 2000 , 9, 137-59	1.9	384
199	Kynuramines, metabolites of melatonin and other indoles: the resurrection of an almost forgotten class of biogenic amines. <i>Journal of Pineal Research</i> , 2009 , 47, 109-126	10.4	379
198	Melatonin: a hormone, a tissue factor, an autocoid, a paracoid, and an antioxidant vitamin. <i>Journal of Pineal Research</i> , 2003 , 34, 75-8	10.4	363
197	Mitochondria and chloroplasts as the original sites of melatonin synthesis: a hypothesis related to melatonin's primary function and evolution in eukaryotes. <i>Journal of Pineal Research</i> , 2013 , 54, 127-38	10.4	345
196	Melatonin directly scavenges hydrogen peroxide: a potentially new metabolic pathway of melatonin biotransformation. <i>Free Radical Biology and Medicine</i> , 2000 , 29, 1177-85	7.8	343
195	Melatonin as an antioxidant: biochemical mechanisms and pathophysiological implications in humans.. <i>Acta Biochimica Polonica</i> , 2003 , 50, 1129-1146	2	343

194	Protective effects of melatonin in reducing oxidative stress and in preserving the fluidity of biological membranes: a review. <i>Journal of Pineal Research</i> , 2014 , 56, 225-37	10.4	311
193	A novel melatonin metabolite, cyclic 3-hydroxymelatonin: a biomarker of in vivo hydroxyl radical generation. <i>Biochemical and Biophysical Research Communications</i> , 1998 , 253, 614-20	3.4	311
192	Melatonin as a free radical scavenger: implications for aging and age-related diseases. <i>Annals of the New York Academy of Sciences</i> , 1994 , 719, 1-12	6.5	311
191	Comparative physiological, metabolomic, and transcriptomic analyses reveal mechanisms of improved abiotic stress resistance in bermudagrass [<i>Cynodon dactylon</i> (L). Pers.] by exogenous melatonin. <i>Journal of Experimental Botany</i> , 2015 , 66, 681-94	7	310
190	Melatonin, the circadian multioscillator system and health: the need for detailed analyses of peripheral melatonin signaling. <i>Journal of Pineal Research</i> , 2012 , 52, 139-66	10.4	310
189	Melatonin as a Potent and Inducible Endogenous Antioxidant: Synthesis and Metabolism. <i>Molecules</i> , 2015 , 20, 18886-906	4.8	306
188	Melatonin and the ovary: physiological and pathophysiological implications. <i>Fertility and Sterility</i> , 2009 , 92, 328-43	4.8	281
187	Melatonin and reproduction revisited. <i>Biology of Reproduction</i> , 2009 , 81, 445-56	3.9	274
186	Nuclear localization of melatonin in different mammalian tissues: immunocytochemical and radioimmunoassay evidence. <i>Journal of Cellular Biochemistry</i> , 1993 , 53, 373-82	4.7	271
185	Free Radical-Mediated Molecular Damage. <i>Annals of the New York Academy of Sciences</i> , 2006 , 939, 200-265	6.5	265
184	High levels of melatonin in the seeds of edible plants: possible function in germ tissue protection. <i>Life Sciences</i> , 2000 , 67, 3023-9	6.8	262
183	Melatonin in walnuts: influence on levels of melatonin and total antioxidant capacity of blood. <i>Nutrition</i> , 2005 , 21, 920-4	4.8	261
182	The pineal hormone melatonin inhibits DNA-adduct formation induced by the chemical carcinogen safrole in vivo. <i>Cancer Letters</i> , 1993 , 70, 65-71	9.9	261
181	Melatonin as a mitochondria-targeted antioxidant: one of evolution's best ideas. <i>Cellular and Molecular Life Sciences</i> , 2017 , 74, 3863-3881	10.3	255
180	Phytomelatonin: a review. <i>Journal of Experimental Botany</i> , 2009 , 60, 57-69	7	250
179	Melatonin--a highly potent endogenous radical scavenger and electron donor: new aspects of the oxidation chemistry of this indole accessed in vitro. <i>Annals of the New York Academy of Sciences</i> , 1994 , 738, 419-20	6.5	243
178	Melatonin mediates the regulation of ABA metabolism, free-radical scavenging, and stomatal behaviour in two <i>Malus</i> species under drought stress. <i>Journal of Experimental Botany</i> , 2015 , 66, 669-80	7	239
177	Anti-inflammatory actions of melatonin and its metabolites, N1-acetyl-N2-formyl-5-methoxykynuramine (AFMK) and N1-acetyl-5-methoxykynuramine (AMK), in macrophages. <i>Journal of Neuroimmunology</i> , 2005 , 165, 139-49	3.5	232

176	Melatonin and mitochondrial function. <i>Life Sciences</i> , 2004 , 75, 765-90	6.8	231
175	Melatonin, a Full Service Anti-Cancer Agent: Inhibition of Initiation, Progression and Metastasis. <i>International Journal of Molecular Sciences</i> , 2017 , 18,	6.3	230
174	Phytomelatonin: assisting plants to survive and thrive. <i>Molecules</i> , 2015 , 20, 7396-437	4.8	225
173	Both physiological and pharmacological levels of melatonin reduce DNA adduct formation induced by the carcinogen safrole. <i>Carcinogenesis</i> , 1994 , 15, 215-8	4.6	224
172	Melatonin: an established antioxidant worthy of use in clinical trials. <i>Molecular Medicine</i> , 2009 , 15, 43-50	6.2	218
171	Melatonin: a novel protective agent against oxidative injury of the ischemic/reperfused heart. <i>Cardiovascular Research</i> , 2003 , 58, 10-9	9.9	218
170	Alzheimer's disease: pathological mechanisms and the beneficial role of melatonin. <i>Journal of Pineal Research</i> , 2012 , 52, 167-202	10.4	217
169	Cardiovascular diseases: protective effects of melatonin. <i>Journal of Pineal Research</i> , 2008 , 44, 16-25	10.4	205
168	Melatonin in Chinese medicinal herbs. <i>Life Sciences</i> , 2003 , 73, 19-26	6.8	202
167	The oxidant/antioxidant network: role of melatonin. <i>NeuroSignals</i> , 1999 , 8, 56-63	1.9	192
166	Antioxidant properties of the melatonin metabolite N1-acetyl-5-methoxykynuramine (AMK): scavenging of free radicals and prevention of protein destruction. <i>Redox Report</i> , 2003 , 8, 205-13	5.9	190
165	The changing biological roles of melatonin during evolution: from an antioxidant to signals of darkness, sexual selection and fitness. <i>Biological Reviews</i> , 2010 , 85, 607-23	13.5	189
164	Melatonin biosynthesis in plants: multiple pathways catalyze tryptophan to melatonin in the cytoplasm or chloroplasts. <i>Journal of Pineal Research</i> , 2016 , 61, 426-437	10.4	187
163	N1-acetyl-N2-formyl-5-methoxykynuramine, a biogenic amine and melatonin metabolite, functions as a potent antioxidant. <i>FASEB Journal</i> , 2001 , 15, 2294-6	0.9	186
162	Melatonin delays leaf senescence and enhances salt stress tolerance in rice. <i>Journal of Pineal Research</i> , 2015 , 59, 91-101	10.4	184
161	Melatonin and pregnancy in the human. <i>Reproductive Toxicology</i> , 2008 , 25, 291-303	3.4	183
160	Pharmacology and physiology of melatonin in the reduction of oxidative stress in vivo. <i>NeuroSignals</i> , 2000 , 9, 160-71	1.9	182
159	Melatonin: A Mitochondrial Targeting Molecule Involving Mitochondrial Protection and Dynamics. <i>International Journal of Molecular Sciences</i> , 2016 , 17,	6.3	182

158	Melatonin and its potential biological functions in the fruits of sweet cherry. <i>Journal of Pineal Research</i> , 2013 , 55, 79-88	10.4	178
157	Reactive oxygen and nitrogen species and cellular and organismal decline: amelioration with melatonin. <i>Mechanisms of Ageing and Development</i> , 2002 , 123, 1007-19	5.6	169
156	Melatonin induces nitric oxide and the potential mechanisms relate to innate immunity against bacterial pathogen infection in Arabidopsis. <i>Journal of Pineal Research</i> , 2015 , 59, 102-8	10.4	167
155	Melatonin as an antioxidant: physiology versus pharmacology. <i>Journal of Pineal Research</i> , 2005 , 39, 215-6	10.4	162
154	Light at night, chronodisruption, melatonin suppression, and cancer risk: a review. <i>Critical Reviews in Oncogenesis</i> , 2007 , 13, 303-28	1.3	159
153	Novel rhythms of N1-acetyl-N2-formyl-5-methoxykynuramine and its precursor melatonin in water hyacinth: importance for phytoremediation. <i>FASEB Journal</i> , 2007 , 21, 1724-9	0.9	155
152	High physiological levels of melatonin in the bile of mammals. <i>Life Sciences</i> , 1999 , 65, 2523-9	6.8	155
151	The universal nature, unequal distribution and antioxidant functions of melatonin and its derivatives. <i>Mini-Reviews in Medicinal Chemistry</i> , 2013 , 13, 373-84	3.2	153
150	Mechanistic and comparative studies of melatonin and classic antioxidants in terms of their interactions with the ABTS cation radical. <i>Journal of Pineal Research</i> , 2003 , 34, 249-59	10.4	152
149	On the significance of an alternate pathway of melatonin synthesis via 5-methoxytryptamine: comparisons across species. <i>Journal of Pineal Research</i> , 2016 , 61, 27-40	10.4	150
148	Ischemia/reperfusion-induced arrhythmias in the isolated rat heart: prevention by melatonin. <i>Journal of Pineal Research</i> , 1998 , 25, 184-91	10.4	148
147	Melatonin alleviates acute lung injury through inhibiting the NLRP3 inflammasome. <i>Journal of Pineal Research</i> , 2016 , 60, 405-14	10.4	146
146	Phytoremediative capacity of plants enriched with melatonin. <i>Plant Signaling and Behavior</i> , 2007 , 2, 514-6	6.5	145
145	Melatonin-induced neuroprotection after closed head injury is associated with increased brain antioxidants and attenuated late-phase activation of NF-kappaB and AP-1. <i>FASEB Journal</i> , 2004 , 18, 149-57	3.9	145
144	Augmentation of indices of oxidative damage in life-long melatonin-deficient rats. <i>Mechanisms of Ageing and Development</i> , 1999 , 110, 157-73	5.6	145
143	Obesity and metabolic syndrome: association with chronodisruption, sleep deprivation, and melatonin suppression. <i>Annals of Medicine</i> , 2012 , 44, 564-77	1.5	143
142	Melatonin induces class A1 heat-shock factors (HSFA1s) and their possible involvement of thermotolerance in Arabidopsis. <i>Journal of Pineal Research</i> , 2015 , 58, 335-42	10.4	140
141	Individual and synergistic antioxidative actions of melatonin: studies with vitamin E, vitamin C, glutathione and desferrioxamine (desferoxamine) in rat liver homogenates. <i>Journal of Pharmacy and Pharmacology</i> , 2001 , 53, 1393-401	4.8	134

140	Peripheral reproductive organ health and melatonin: ready for prime time. <i>International Journal of Molecular Sciences</i> , 2013 , 14, 7231-72	6.3	130
139	Protective effects of melatonin in experimental free radical-related ocular diseases. <i>Journal of Pineal Research</i> , 2006 , 40, 101-9	10.4	129
138	When melatonin gets on your nerves: its beneficial actions in experimental models of stroke. <i>Experimental Biology and Medicine</i> , 2005 , 230, 104-17	3.7	129
137	Melatonin reduces prostate cancer cell growth leading to neuroendocrine differentiation via a receptor and PKA independent mechanism. <i>Prostate</i> , 2005 , 63, 29-43	4.2	128
136	Melatonin: A Versatile Protector against Oxidative DNA Damage. <i>Molecules</i> , 2018 , 23,	4.8	126
135	Arabidopsis serotonin N-acetyltransferase knockout mutant plants exhibit decreased melatonin and salicylic acid levels resulting in susceptibility to an avirulent pathogen. <i>Journal of Pineal Research</i> , 2015 , 58, 291-9	10.4	124
134	Neurotoxins: free radical mechanisms and melatonin protection. <i>Current Neuropharmacology</i> , 2010 , 8, 194-210	7.6	121
133	DNA oxidatively damaged by chromium(III) and H ₂ O ₂ is protected by the antioxidants melatonin, N(1)-acetyl-N(2)-formyl-5-methoxykynuramine, resveratrol and uric acid. <i>International Journal of Biochemistry and Cell Biology</i> , 2001 , 33, 775-83	5.6	121
132	Melatonin induces browning of inguinal white adipose tissue in Zucker diabetic fatty rats. <i>Journal of Pineal Research</i> , 2013 , 55, 416-23	10.4	120
131	Fundamental issues related to the origin of melatonin and melatonin isomers during evolution: relation to their biological functions. <i>International Journal of Molecular Sciences</i> , 2014 , 15, 15858-90	6.3	120
130	Melatonin, xanthurenic acid, resveratrol, EGCG, vitamin C and alpha-lipoic acid differentially reduce oxidative DNA damage induced by Fenton reagents: a study of their individual and synergistic actions. <i>Journal of Pineal Research</i> , 2003 , 34, 269-77	10.4	116
129	INDOLE-3-ACETIC ACID INDUCIBLE 17 positively modulates natural leaf senescence through melatonin-mediated pathway in Arabidopsis. <i>Journal of Pineal Research</i> , 2015 , 58, 26-33	10.4	115
128	Melatonin induces the transcripts of CBF/DREB1s and their involvement in both abiotic and biotic stresses in Arabidopsis. <i>Journal of Pineal Research</i> , 2015 , 59, 334-42	10.4	115
127	Caloric restriction, resveratrol and melatonin: Role of SIRT1 and implications for aging and related-diseases. <i>Mechanisms of Ageing and Development</i> , 2015 , 146-148, 28-41	5.6	114
126	Role of melatonin in the regulation of autophagy and mitophagy: a review. <i>Molecular and Cellular Endocrinology</i> , 2012 , 361, 12-23	4.4	114
125	Inhibition of neuronal nitric oxide synthase activity by N1-acetyl-5-methoxykynuramine, a brain metabolite of melatonin. <i>Journal of Neurochemistry</i> , 2006 , 98, 2023-33	6	111
124	Increased levels of oxidatively damaged DNA induced by chromium(III) and H ₂ O ₂ : protection by melatonin and related molecules. <i>Journal of Pineal Research</i> , 2000 , 29, 54-61	10.4	106
123	A label-free differential proteomics analysis reveals the effect of melatonin on promoting fruit ripening and anthocyanin accumulation upon postharvest in tomato. <i>Journal of Pineal Research</i> , 2016 , 61, 138-53	10.4	105

122	Melatonin: an antioxidant in edible plants. <i>Annals of the New York Academy of Sciences</i> , 2002 , 957, 341-46.5	10.4	103
121	Melatonin and sirtuins: A "not-so unexpected" relationship. <i>Journal of Pineal Research</i> , 2017 , 62, e12391	10.4	102
120	Melatonin enhances cold tolerance in drought-primed wild-type and abscisic acid-deficient mutant barley. <i>Journal of Pineal Research</i> , 2016 , 61, 328-39	10.4	101
119	Melatonin as a naturally occurring co-substrate of quinone reductase-2, the putative MT3 melatonin membrane receptor: hypothesis and significance. <i>Journal of Pineal Research</i> , 2007 , 43, 317-20	10.4	100
118	Protective Effects of Melatonin and Mitochondria-targeted Antioxidants Against Oxidative Stress: A Review. <i>Current Medicinal Chemistry</i> , 2015 , 22, 2690-711	4.3	100
117	Beneficial effects of melatonin in cardiovascular disease. <i>Annals of Medicine</i> , 2010 , 42, 276-85	1.5	99
116	Melatonin as a pharmacological agent against neuronal loss in experimental models of Huntington's disease, Alzheimer's disease and parkinsonism. <i>Annals of the New York Academy of Sciences</i> , 1999 , 890, 471-85	6.5	97
115	Comparative physiological and proteomic analyses reveal the actions of melatonin in the reduction of oxidative stress in Bermuda grass (<i>Cynodon dactylon</i> (L). Pers.). <i>Journal of Pineal Research</i> , 2015 , 59, 120-31	10.4	96
114	Orally administered melatonin reduces oxidative stress and proinflammatory cytokines induced by amyloid-beta peptide in rat brain: a comparative, in vivo study versus vitamin C and E. <i>Journal of Pineal Research</i> , 2003 , 35, 80-4	10.4	96
113	Melatonin uptake through glucose transporters: a new target for melatonin inhibition of cancer. <i>Journal of Pineal Research</i> , 2015 , 58, 234-50	10.4	94
112	Role of melatonin in metabolic regulation. <i>Reviews in Endocrine and Metabolic Disorders</i> , 2009 , 10, 261-70	10.5	93
111	Melatonin promotes embryonic development and reduces reactive oxygen species in vitrified mouse 2-cell embryos. <i>Journal of Pineal Research</i> , 2012 , 52, 305-11	10.4	89
110	Melatonin protects hippocampal neurons in vivo against kainic acid-induced damage in mice. <i>Journal of Neuroscience Research</i> , 1998 , 54, 382-9	4.4	88
109	Melatonin reduces oxidative neurotoxicity due to quinolinic acid: in vitro and in vivo findings. <i>Neuropharmacology</i> , 2000 , 39, 507-14	5.5	87
108	Melatonin reduces lipid peroxidation and membrane viscosity. <i>Frontiers in Physiology</i> , 2014 , 5, 377	4.6	85
107	Melatonin and its metabolites: new findings regarding their production and their radical scavenging actions. <i>Acta Biochimica Polonica</i> , 2007 , 54, 1-9	2	85
106	Melatonin combats molecular terrorism at the mitochondrial level. <i>Interdisciplinary Toxicology</i> , 2008 , 1, 137-49	2.3	83
105	Pharmacological utility of melatonin in the treatment of septic shock: experimental and clinical evidence. <i>Journal of Pharmacy and Pharmacology</i> , 2006 , 58, 1153-65	4.8	82

104	Oxidative damage to catalase induced by peroxy radicals: functional protection by melatonin and other antioxidants. <i>Free Radical Research</i> , 2003 , 37, 543-53	4	79
103	Purslane: a plant source of omega-3 fatty acids and melatonin. <i>Journal of Pineal Research</i> , 2005 , 39, 331-204	20.4	79
102	Chronic melatonin treatment prevents age-dependent cardiac mitochondrial dysfunction in senescence-accelerated mice. <i>Free Radical Research</i> , 2007 , 41, 15-24	4	78
101	Melatonin alleviates low PS I-limited carbon assimilation under elevated CO and enhances the cold tolerance of offspring in chlorophyll b-deficient mutant wheat. <i>Journal of Pineal Research</i> , 2018 , 64, e124534	10.4	77
100	Diabetes and Alzheimer disease, two overlapping pathologies with the same background: oxidative stress. <i>Oxidative Medicine and Cellular Longevity</i> , 2015 , 2015, 985845	6.7	76
99	Melatonin and tryptophan derivatives as free radical scavengers and antioxidants. <i>Advances in Experimental Medicine and Biology</i> , 1999 , 467, 379-87	3.6	75
98	Significance of high levels of endogenous melatonin in Mammalian cerebrospinal fluid and in the central nervous system. <i>Current Neuropharmacology</i> , 2010 , 8, 162-7	7.6	75
97	Natural Variation in Banana Varieties Highlights the Role of Melatonin in Postharvest Ripening and Quality. <i>Journal of Agricultural and Food Chemistry</i> , 2017 , 65, 9987-9994	5.7	73
96	Melatonin in edible plants (phytomelatonin): Identification, concentrations, bioavailability and proposed functions. <i>World Review of Nutrition and Dietetics</i> , 2007 , 97, 211-230	0.2	72
95	Identification of genes for melatonin synthetic enzymes in 'Red Fuji' apple (<i>Malus domestica</i> Borkh.cv.Red) and their expression and melatonin production during fruit development. <i>Journal of Pineal Research</i> , 2013 , 55, 443-51	10.4	71
94	Comparative metabolomic analysis highlights the involvement of sugars and glycerol in melatonin-mediated innate immunity against bacterial pathogen in Arabidopsis. <i>Scientific Reports</i> , 2015 , 5, 15815	4.9	67
93	Melatonin relieves the neural oxidative burden that contributes to dementias. <i>Annals of the New York Academy of Sciences</i> , 2004 , 1035, 179-96	6.5	63
92	Antioxidant activity of melatonin in Chinese hamster ovarian cells: changes in cellular proliferation and differentiation. <i>Biochemical and Biophysical Research Communications</i> , 2003 , 302, 625-34	3.4	62
91	Cyclic-3-hydroxymelatonin (C3HOM), a potent antioxidant, scavenges free radicals and suppresses oxidative reactions. <i>Current Medicinal Chemistry</i> , 2014 , 21, 1557-65	4.3	62
90	Role of melatonin in the epigenetic regulation of breast cancer. <i>Breast Cancer Research and Treatment</i> , 2009 , 115, 13-27	4.4	61
89	The protective role of endogenous melatonin in carrageenan-induced pleurisy in the rat. <i>FASEB Journal</i> , 1999 , 13, 1930-8	0.9	61
88	Actions of melatonin in the reduction of oxidative stress 2000 , 7, 444		58
87	Melatonin reduces lipid peroxidation and tissue edema in cerulein-induced acute pancreatitis in rats. <i>Digestive Diseases and Sciences</i> , 1999 , 44, 2257-62	4	55

86	Role of melatonin on production and preservation of gametes and embryos: a brief review. <i>Animal Reproduction Science</i> , 2014 , 145, 150-60	2.1	54
85	Melatonin enhances the occurrence of autophagy induced by oxidative stress in Arabidopsis seedlings. <i>Journal of Pineal Research</i> , 2015 , 58, 479-89	10.4	53
84	Melatonin identified in meats and other food stuffs: potentially nutritional impact. <i>Journal of Pineal Research</i> , 2014 , 57, 213-8	10.4	52
83	Inhibitory effect of melatonin on products of lipid peroxidation resulting from chronic ethanol administration. <i>Alcohol and Alcoholism</i> , 1999 , 34, 842-50	3.5	52
82	Predominance of 2-hydroxymelatonin over melatonin in plants. <i>Journal of Pineal Research</i> , 2015 , 59, 448-54	10.4	50
81	Urinary metabolites and antioxidant products of exogenous melatonin in the mouse. <i>Journal of Pineal Research</i> , 2006 , 40, 343-9	10.4	50
80	Emergence of naturally occurring melatonin isomers and their proposed nomenclature. <i>Journal of Pineal Research</i> , 2012 , 53, 113-21	10.4	49
79	Functional aspects of redox control during neuroinflammation. <i>Antioxidants and Redox Signaling</i> , 2010 , 13, 193-247	8.4	49
78	Ebola virus disease: potential use of melatonin as a treatment. <i>Journal of Pineal Research</i> , 2014 , 57, 381-404	10.4	48
77	Clinical relevance of melatonin in ovarian and placental physiology: a review. <i>Gynecological Endocrinology</i> , 2014 , 30, 83-9	2.4	48
76	Cyclic 3-hydroxymelatonin: a melatonin metabolite generated as a result of hydroxyl radical scavenging. <i>NeuroSignals</i> , 1999 , 8, 70-4	1.9	48
75	Melatonin's role as a co-adjuvant treatment in colonic diseases: A review. <i>Life Sciences</i> , 2017 , 170, 72-81	6.8	47
74	Critical role of glutathione in melatonin enhancement of tumor necrosis factor and ionizing radiation-induced apoptosis in prostate cancer cells in vitro. <i>Journal of Pineal Research</i> , 2008 , 45, 258-70	10.4	47
73	Beneficial actions of melatonin in the management of viral infections: a new use for this "molecular handyman"?. <i>Reviews in Medical Virology</i> , 2012 , 22, 323-38	11.7	46
72	Melatonin, longevity and health in the aged: an assessment. <i>Free Radical Research</i> , 2002 , 36, 1323-9	4	46
71	An evolutionary view of melatonin synthesis and metabolism related to its biological functions in plants. <i>Journal of Experimental Botany</i> , 2020 , 71, 4677-4689	7	45
70	Melatonin Improves Waterlogging Tolerance of (Linn.) Borkh. Seedlings by Maintaining Aerobic Respiration, Photosynthesis and ROS Migration. <i>Frontiers in Plant Science</i> , 2017 , 8, 483	6.2	45
69	Kinetics of the neuroinflammation-oxidative stress correlation in rat brain following the injection of fibrillar amyloid-beta onto the hippocampus in vivo. <i>Journal of Neuroimmunology</i> , 2004 , 150, 20-8	3.5	45

68	Melatonin reduces mortality and oxidatively mediated hepatic and renal damage due to diquat treatment. <i>Journal of Pineal Research</i> , 2007 , 42, 166-71	10.4	43
67	Antioxidant strategies in protection against neurodegenerative disorders. <i>Expert Opinion on Therapeutic Patents</i> , 2003 , 13, 1513-1543	6.8	43
66	Effects of melatonin on the proliferation and apoptosis of sheep granulosa cells under thermal stress. <i>International Journal of Molecular Sciences</i> , 2014 , 15, 21090-104	6.3	41
65	Melatonin as pharmacologic support in burn patients: a proposed solution to thermal injury-related lymphocytopenia and oxidative damage. <i>Critical Care Medicine</i> , 2007 , 35, 1177-85	1.4	41
64	In vivo and in vitro effects of the pineal gland and melatonin on [Ca(2+) + Mg2+]-dependent ATPase in cardiac sarcolemma. <i>Journal of Pineal Research</i> , 1993 , 14, 178-83	10.4	41
63	CSF generation by pineal gland results in a robust melatonin circadian rhythm in the third ventricle as an unique light/dark signal. <i>Medical Hypotheses</i> , 2016 , 86, 3-9	3.8	40
62	Melatonin uptake in prostate cancer cells: intracellular transport versus simple passive diffusion. <i>Journal of Pineal Research</i> , 2008 , 45, 247-57	10.4	40
61	Melatonin reduces the oxidation of nuclear DNA and membrane lipids induced by the carcinogen delta-aminolevulinic acid. <i>International Journal of Cancer</i> , 2000 , 88, 7-11	7.5	40
60	Combination of melatonin and a peroxisome proliferator-activated receptor-gamma agonist induces apoptosis in a breast cancer cell line. <i>Journal of Pineal Research</i> , 2009 , 46, 115-6	10.4	39
59	Interactions between melatonin and nicotinamide nucleotide: NADH preservation in cells and in cell-free systems by melatonin. <i>Journal of Pineal Research</i> , 2005 , 39, 185-94	10.4	39
58	Protective effects of melatonin against oxidation of guanine bases in DNA and decreased microsomal membrane fluidity in rat liver induced by whole body ionizing radiation. <i>Molecular and Cellular Biochemistry</i> , 2000 , 211, 137-44	4.2	39
57	Melatonin reduces phenylhydrazine-induced oxidative damage to cellular membranes: evidence for the involvement of iron. <i>International Journal of Biochemistry and Cell Biology</i> , 2000 , 32, 1045-54	5.6	39
56	Melatonin and its derivatives cyclic 3-hydroxymelatonin, N1-acetyl-N2-formyl-5-methoxykynuramine and 6-methoxymelatonin reduce oxidative DNA damage induced by Fenton reagents. <i>Journal of Pineal Research</i> , 2003 , 34, 178-184	10.4	37
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