

Physiological and metabolic functions of melatonin

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Functional MT ₁ and MT ₂ Melatonin Receptors in Mammals. <i>Endocrine</i> , 2005, 27, 101-110.	2.2	688
2	METABOLISM OF MELATONIN BY HUMAN CYTOCHROMES P450. <i>Drug Metabolism and Disposition</i> , 2005, 33, 489-494.	1.7	274
3	Melatonin modulates rat myotube-acetylcholine receptors by inhibiting calmodulin. <i>European Journal of Pharmacology</i> , 2005, 525, 24-31.	1.7	21
4	General Anesthesia for Surgery Influences Melatonin and Cortisol Levels. <i>World Journal of Surgery</i> , 2005, 29, 826-829.	0.8	36
6	Hepato- and neurotoxicity induced by thioacetamide: Protective effects of melatonin and dimethylsulfoxide. <i>Pharmacological Research</i> , 2005, 52, 223-228.	3.1	46
8	Design and Synthesis of N-(3,3-Diphenylpropenyl)alkanamides as a Novel Class of High-Affinity MT ₂ -Selective Melatonin Receptor Ligands. <i>Journal of Medicinal Chemistry</i> , 2006, 49, 7393-7403.	2.9	25
9	Intake of melatonin is associated with amelioration of physiological changes, both metabolic and morphological pathologies associated with obesity: an animal model. <i>International Journal of Experimental Pathology</i> , 2006, 88, 19-29.	0.6	77
10	Dayâ€“ night specific binding of 2-[¹²⁵ I]iodomelatonin and melatonin content in gill, small intestine and kidney of three fish species. <i>Journal of Comparative Physiology B: Biochemical, Systemic, and Environmental Physiology</i> , 2006, 176, 277-285.	0.7	49
11	Effects of melatonin administration on oxidative stress and daily locomotor activity patterns in goldfish. <i>Journal of Physiology and Biochemistry</i> , 2006, 62, 17-25.	1.3	14
12	Towards the Development of Mixed MT ₁ -Agonist/MT ₂ -Antagonist Melatonin Receptor Ligands. <i>ChemMedChem</i> , 2006, 1, 1099-1105.	1.6	12
13	Urinary 6-Sulfatoxymelatonin and Mammographic Density in Japanese Women. <i>Cancer Epidemiology Biomarkers and Prevention</i> , 2007, 16, 2509-2512.	1.1	4
14	Night Shift Work and the Risk of Endometrial Cancer. <i>Cancer Research</i> , 2007, 67, 10618-10622.	0.4	287
15	Melatonin modulates glycine currents of retinal ganglion cells in rat. <i>NeuroReport</i> , 2007, 18, 1675-1678.	0.6	18
16	The brain's master circadian clock: Implications and opportunities for therapy of sleep disorders. <i>Sleep Medicine Reviews</i> , 2007, 11, 59-70.	3.8	98
17	N-(Substituted-anilinoethyl)amides: Design, Synthesis, and Pharmacological Characterization of a New Class of Melatonin Receptor Ligands. <i>Journal of Medicinal Chemistry</i> , 2007, 50, 6618-6626.	2.9	78
18	Melatonin therapy for headache disorders. <i>Drug Development Research</i> , 2007, 68, 329-334.	1.4	6
19	Synthesis, Enantiomeric Resolution, and Structureâ€“Activity Relationship Study of a Series of 10,11-â€“Dihydroâ€“5-H-â€“Dibenzo[a,d]cycloheptene MT ₂ Receptor Antagonists. <i>ChemMedChem</i> , 2007, 2, 1741-1749.	1.6	11
20	Potential role of tryptophan derivatives in stress responses characterized by the generation of reactive oxygen and nitrogen species. <i>Journal of Pineal Research</i> , 2008, 45, 235-246.	3.4	259

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22	Melatonin inhibitory effect on cAMP accumulation in the chick retina development. <i>International Journal of Developmental Neuroscience</i> , 2008, 26, 277-282.	0.7	9
23	The Biological Clock and Its Resetting by Light. , 2008, , 321-388.		3
24	Incorporation in polymeric nanocapsules improves the antioxidant effect of melatonin against lipid peroxidation in mice brain and liver. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2008, 69, 64-71.	2.0	55
25	Antidepressivos y gl�ndula pineal. <i>Semergen</i> , 2008, 34, 183-192.	0.2	0
26	An improved synthesis of cis-4-phenyl-2-propionamidotetralin (4-P-PDOT): a selective MT ₂ melatonin receptor antagonist. <i>Organic and Biomolecular Chemistry</i> , 2008, 6, 147-150.	1.5	15
27	Synthetic and Natural Compounds that Interact with Human Cytochrome P450 1A2 and Implications in Drug Development. <i>Current Medicinal Chemistry</i> , 2009, 16, 4066-4218.	1.2	107
28	Substrates, Inducers, Inhibitors and Structure-Activity Relationships of Human Cytochrome P450 2C9 and Implications in Drug Development. <i>Current Medicinal Chemistry</i> , 2009, 16, 3480-3675.	1.2	142
29	Social Ecology, Genomics, and African American Health: A Nonlinear Dynamical Perspective. <i>Journal of Black Psychology</i> , The, 2009, 35, 154-179.	1.0	10
30	Retinal light input is required to sustain plasma melatonin rhythms in Nile tilapia <i>Oreochromis niloticus niloticus</i> . <i>Brain Research</i> , 2009, 1269, 61-67.	1.1	13
31	<i>N</i> -(Anilinoethyl)amides: Design and Synthesis of Metabolically Stable, Selective Melatonin Receptor Ligands. <i>ChemMedChem</i> , 2009, 4, 1746-1755.	1.6	30
32	Melatonin, as an adjuvant�like agent, enhances platelet responsiveness. <i>Journal of Pineal Research</i> , 2009, 46, 275-285.	3.4	16
33	2-[(2,3-Dihydro-1 <i>H</i> -indol-1-yl)methyl]melatonin Analogues: A Novel Class of MT ₂ -Selective Melatonin Receptor Antagonists. <i>Journal of Medicinal Chemistry</i> , 2009, 52, 826-833.	2.9	29
34	Circulating melatonin and the risk of breast and endometrial cancer in women. <i>Cancer Letters</i> , 2009, 281, 1-7.	3.2	132
35	Polymorphism of human cytochrome P450 enzymes and its clinical impact. <i>Drug Metabolism Reviews</i> , 2009, 41, 89-295.	1.5	671
37	Investigational melatonin receptor agonists. <i>Expert Opinion on Investigational Drugs</i> , 2010, 19, 747-764.	1.9	54
38	Electrophysiological Effects of Melatonin on Mouse <i>Per1</i> and non- <i>Per1</i> Suprachiasmatic Nuclei Neurons <i>In Vitro</i> . <i>Journal of Neuroendocrinology</i> , 2010, 22, 1148-1156.	1.2	35
39	Melatonin potentiates glycine currents through a PLC/PKC signalling pathway in rat retinal ganglion cells. <i>Journal of Physiology</i> , 2010, 588, 2605-2619.	1.3	63
40	<i>MTNR1B</i> G24E Variant Associates With BMI and Fasting Plasma Glucose in the General Population in Studies of 22,142 Europeans. <i>Diabetes</i> , 2010, 59, 1539-1548.	0.3	43

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41	International Union of Basic and Clinical Pharmacology. LXXV. Nomenclature, Classification, and Pharmacology of G Protein-Coupled Melatonin Receptors. <i>Pharmacological Reviews</i> , 2010, 62, 343-380.	7.1	486
42	Structure, function, regulation and polymorphism and the clinical significance of human cytochrome P450 1A2. <i>Drug Metabolism Reviews</i> , 2010, 42, 268-354.	1.5	220
43	Appetite regulation: The central role of melatonin in <i>Danio rerio</i> . <i>Hormones and Behavior</i> , 2010, 58, 780-785.	1.0	79
44	Toward the Definition of Stereochemical Requirements for MT ₂ -Selective Antagonists and Partial Agonists by Studying 4-Phenyl-2-propionamidotetralin Derivatives. <i>Journal of Medicinal Chemistry</i> , 2011, 54, 8362-8372.	2.9	24
45	Melatonin inhibits tetraethylammonium-sensitive potassium channels of rod ON type bipolar cells via MT2 receptors in rat retina. <i>Neuroscience</i> , 2011, 173, 19-29.	1.1	31
46	Plasma melatonin in domestic female Mediterranean sheep (Comisana breed) and goats (Maltese and) <i>Tj ETQq1 1 0.784314 18 BT /Over</i>	0.9	18
47	RGS2 and RGS4 modulate melatonin-induced potentiation of glycine currents in rat retinal ganglion cells. <i>Brain Research</i> , 2011, 1411, 1-8.	1.1	20
48	Bivalent ligand approach on N-{2-[(3-methoxyphenyl)methylamino]ethyl}acetamide: Synthesis, binding affinity and intrinsic activity for MT1 and MT2 melatonin receptors. <i>Bioorganic and Medicinal Chemistry</i> , 2011, 19, 4910-4916.	1.4	13
49	Design and synthesis of 1-(2-alkanamidoethyl)-6-methoxy-7-azaindole derivatives as potent melatonin agonists. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2011, 21, 2316-2319.	1.0	15
50	Differences in Daily Rhythms of Wrist Temperature Between Obese and Normal-Weight Women: Associations With Metabolic Syndrome Features. <i>Chronobiology International</i> , 2011, 28, 425-433.	0.9	78
51	Pharmacokinetics, oral bioavailability and metabolism of a novel isoquinolinone-based melatonin receptor agonist in rats. <i>Xenobiotica</i> , 2012, 42, 1138-1150.	0.5	4
52	5-Methoxy-2-[(5-methoxy-1 <i>H</i> -indol-1-yl)carbonyl]-1 <i>H</i> -indole. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2012, 68, o1775-o1775.	0.2	1
53	Recent Progress in the Development of Agonists and Antagonists for Melatonin Receptors. <i>Current Medicinal Chemistry</i> , 2012, 19, 3532-3549.	1.2	47
54	Nanotherapeutics for Alzheimer's disease (AD): Past, present and future. <i>Journal of Drug Targeting</i> , 2012, 20, 97-113.	2.1	37
55	MT ₁ -Selective Melatonin Receptor Ligands: Synthesis, Pharmacological Evaluation, and Molecular Dynamics Investigation of <i>N</i> -{[(3- <i>O</i> -substituted)anilino]alkyl}amides. <i>ChemMedChem</i> , 2012, 7, 1954-1964.	1.6	24
56	Comparative evaluation of the antioxidant activity of melatonin and related indoles. <i>Journal of Food Composition and Analysis</i> , 2012, 28, 16-22.	1.9	34
57	Melatonin and the metabolic syndrome: a tool for effective therapy in obesity-associated abnormalities?. <i>Acta Physiologica</i> , 2012, 205, 209-223.	1.8	96
58	<i>N</i> -(Phenoxyalkyl)amides as MT1 and MT2 ligands: Antioxidant properties and inhibition of Ca ²⁺ /CaM-dependent kinase II. <i>Bioorganic and Medicinal Chemistry</i> , 2013, 21, 847-851.	1.4	29

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59	Nanomolar simultaneous determination of levodopa and melatonin at a new cobalt hydroxide nanoparticles and multi-walled carbon nanotubes composite modified carbon ionic liquid electrode. <i>Sensors and Actuators B: Chemical</i> , 2013, 183, 265-272.	4.0	54
60	The effect of melatonin and/or complex vitamin B1,B6,B12 in modulating epinephrine-induced stress in male rats. <i>Brazilian Archives of Biology and Technology</i> , 2013, 56, 393-403.	0.5	4
61	Coffee and caffeine potentiate the anti-amyloidogenic activity of melatonin via inhibition of A β ; oligomerization and modulation of the Tau-mediated pathway in N2a/APP cells. <i>Drug Design, Development and Therapy</i> , 2014, 9, 241.	2.0	18
62	Melatonin in Parkinson's Disease. , 2014, , .		5
63	Daily profile in two circadian markers – melatonin and cortisol – and associations with metabolic syndrome components. <i>Physiology and Behavior</i> , 2014, 123, 231-235.	1.0	103
64	Melatonin and the Metabolic Syndrome. , 2014, , 71-95.		2
65	Hormones and hibernation: possible links between hormone systems, winter energy balance and white-nose syndrome in bats. <i>Hormones and Behavior</i> , 2014, 66, 66-73.	1.0	21
66	Melatonergic drugs in development. <i>Clinical Pharmacology: Advances and Applications</i> , 2014, 6, 127.	0.8	26
67	Synthesis and <i>in vitro</i> evaluation of melatonin entrapped PLA nanoparticles: α -oxidative stress and T cell response using golden hamster. <i>Journal of Biomedical Materials Research - Part A</i> , 2015, 103, 3034-3044.	2.1	12
68	Agomelatine or ramelteon as treatment adjuncts in glioblastoma and other M1- or M2-expressing cancers. <i>Wspolczesna Onkologia</i> , 2015, 2, 157-162.	0.7	10
70	Melatonin induces apoptosis in cholangiocarcinoma cell lines by activating the reactive oxygen species-mediated mitochondrial pathway. <i>Oncology Reports</i> , 2015, 33, 1443-1449.	1.2	36
71	Gene-Gene Interplay and Gene-Diet Interactions Involving the <i>MTNR1B</i> rs10830963 Variant with Body Weight Loss. <i>Journal of Nutrigenetics and Nutrigenomics</i> , 2015, 7, 232-242.	1.8	25
72	Comparative study between transdermal fentanyl and melatonin patches on postoperative pain relief after lumbar laminectomy, a double-blind, placebo-controlled trial. <i>Egyptian Journal of Anaesthesia</i> , 2016, 32, 323-332.	0.2	6
73	The antioxidative property of melatonin against brain ischemia. <i>Expert Review of Neurotherapeutics</i> , 2016, 16, 841-848.	1.4	19
74	Physiological aspects of music and longevity. <i>Advances in Gerontology</i> , 2016, 6, 101-110.	0.1	2
75	Facile and novel synthesis of palladium nanoparticles supported on a carbon aerogel for ultrasensitive electrochemical sensing of biomolecules. <i>Nanoscale</i> , 2017, 9, 6486-6496.	2.8	46
76	Melatonin as a multifunctional anti-cancer molecule: Implications in gastric cancer. <i>Life Sciences</i> , 2017, 185, 38-45.	2.0	47
77	Does the use of melatonin overcome drug resistance in cancer chemotherapy?. <i>Life Sciences</i> , 2018, 196, 143-155.	2.0	44

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78	Melatonin Modulation of Sirtuin-1 Attenuates Liver Injury in a Hypercholesterolemic Mouse Model. <i>BioMed Research International</i> , 2018, 2018, 1-9.	0.9	23
79	Design, synthesis and biological evaluation of tryptamine salicylic acid derivatives as potential antitumor agents. <i>MedChemComm</i> , 2019, 10, 573-583.	3.5	7
80	Melatonin is an appropriate candidate for breast cancer treatment: Based on known molecular mechanisms. <i>Journal of Cellular Biochemistry</i> , 2019, 120, 12208-12215.	1.2	15
81	Mitochondrial pathway of apoptosis and necrosis contribute to tenofovir disoproxil fumarate-induced renal damage in rats. <i>Human and Experimental Toxicology</i> , 2019, 38, 288-302.	1.1	8
82	A circadian rhythm-related MTNR1B genetic variant modulates the effect of weight-loss diets on changes in adiposity and body composition: the POUNDS Lost trial. <i>European Journal of Nutrition</i> , 2019, 58, 1381-1389.	1.8	27
83	Melatonin Effects on Glucose Metabolism: Time To Unlock the Controversy. <i>Trends in Endocrinology and Metabolism</i> , 2020, 31, 192-204.	3.1	89
84	Melatonin in the treatment of fibromyalgia symptoms: A systematic review. <i>Complementary Therapies in Clinical Practice</i> , 2020, 38, 101072.	0.7	22
85	Melatonin Induces Apoptotic Cell Death in 3T3-L1 Preadipocytes. <i>Molecular Biology</i> , 2020, 54, 204-212.	0.4	2
86	A circadian rhythm-related MTNR1B genetic variant (rs10830963) modulate body weight change and insulin resistance after 9 months of a high protein/low carbohydrate vs a standard hypocaloric diet. <i>Journal of Diabetes and Its Complications</i> , 2020, 34, 107534.	1.2	13
87	Melatonin protects against tenofovir-induced nephrotoxicity in rats by targeting multiple cellular pathways. <i>Human and Experimental Toxicology</i> , 2021, 40, 826-850.	1.1	4
88	Comparison of Analytical Methods for the Rapid Determination of Melatonin in Food Supplements. <i>Food Analytical Methods</i> , 2021, 14, 734-741.	1.3	7
89	Nail Melatonin Content: A Suitable Non-Invasive Marker of Melatonin Production. <i>International Journal of Molecular Sciences</i> , 2021, 22, 921.	1.8	6
90	Physiology and Pharmacology of Melatonin. , 2021, , 261-277.		0
91	Role of melatonin in the angiogenesis potential; highlights on the cardiovascular disease. <i>Journal of Inflammation</i> , 2021, 18, 4.	1.5	17
92	Discovery of a Potent and Orally Bioavailable Melatonin Receptor Agonist. <i>Journal of Medicinal Chemistry</i> , 2021, 64, 3059-3074.	2.9	9
93	Chronotype and risk of post-menopausal endometrial cancer in the California Teachers Study. <i>Chronobiology International</i> , 2021, 38, 1151-1161.	0.9	14
94	The Role of Nutrient Supplementation in the Management of Chronic Pain in Fibromyalgia: A Narrative Review. <i>Pain and Therapy</i> , 2021, 10, 827-848.	1.5	7
95	A Narrative Review of the Role of Diet and Lifestyle Factors in the Development and Prevention of Endometrial Cancer. <i>Cancers</i> , 2021, 13, 2149.	1.7	27

