Rosa MarÃ-a Sainz

List of Publications by Year
in descending order

108 papers	12,582 citations	36303 51 h-index	33894 99 g-index
114 all docs	114 docs citations	114 times ranked	10778 citing authors

#	Article	IF	Citations
1	Regulation of antioxidant enzymes: a significant role for melatonin. Journal of Pineal Research, 2004, 36, 1-9.	7.4	1,713
2	Melatonin as an antioxidant: under promises but over delivers. Journal of Pineal Research, 2016, 61, 253-278.	7.4	1,126
3	Chemical and Physical Properties and Potential Mechanisms: Melatonin as a Broad Spectrum Antioxidant and Free Radical Scavenger. Current Topics in Medicinal Chemistry, 2002, 2, 181-197.	2.1	885
4	Melatonin as an antioxidant: biochemical mechanisms and pathophysiological implications in humans.. Acta Biochimica Polonica, 2003, 50, 1129-1146.	0.5	457
5	Melatonin: a hormone, a tissue factor, an autocoid, a paracoid, and an antioxidant vitamin. Journal of Pineal Research, 2003, 34, 75-78.	7.4	449
6	Neurohormone melatonin prevents cell damage: effect on gene expression for antioxidant enzymes. FASEB Journal, 1996, 10, 882-890.	0.5	438
7	Melatonin: reducing the toxicity and increasing the efficacy of drugs. Journal of Pharmacy and Pharmacology, 2010, 54, 1299-1321.	2.4	349
8	Melatonin and Reproduction Revisited. Biology of Reproduction, 2009, 81, 445-456.	2.7	320
9	Melatonin increases gene expression for antioxidant enzymes in rat brain cortex. Journal of Pineal Research, 1998, 24, 83-89.	7.4	287
10	Melatonin and mitochondrial function. Life Sciences, 2004, 75, 765-790.	4.3	286
11	Identification of highly elevated levels of melatonin in bone marrow: its origin and significance. Biochimica Et Biophysica Acta - General Subjects, 1999, 1472, 206-214.	2.4	278
12	Anti-inflammatory actions of melatonin and its metabolites, N1-acetyl-N2-formyl-5-methoxykynuramine (AFMK) and N1-acetyl-5-methoxykynuramine (AMK), in macrophages. Journal of Neuroimmunology, 2005, 165, 139-149.	2.3	274
13	Melatonin and cell death: differential actions on apoptosis in normal and cancer cells. Cellular and Molecular Life Sciences, 2003, 60, 1407-1426.	5.4	266
14	The changing biological roles of melatonin during evolution: from an antioxidant to signals of darkness, sexual selection and fitness. Biological Reviews, 2010, 85, 607-623.	10.4	252
15	The Oxidant/Antioxidant Network: Role of Melatonin. NeuroSignals, 1999, 8, 56-63.	0.9	242
16	Melatonin regulation of antioxidant enzyme gene expression. Cellular and Molecular Life Sciences, 2002, 59, 1706-1713.	5.4	241
17	N1â€acetylâ€N2â€formylâ€5â€methoxykynuramine, a biogenic amine and melatonin metabolite, functions as a potent antioxidant. FASEB Journal, 2001, 15, 1-16.	0.5	232
18	Antioxidant properties of the melatonin metabolite N1-acetyl-5-methoxykynuramine (AMK): scavenging of free radicals and prevention of protein destruction. Redox Report, 2003, 8, 205-213.	4.5	215

#	ARTICLE	IF	CITATIONS
19	Mechanistic and comparative studies of melatonin and classic antioxidants in terms of their interactions with the ABTS cation radical. Journal of Pineal Research, 2003, 34, 249-259.	7.4	178
20	Melatonin and sirtuins: A â€œnotâ€šo unexpectedâ€•relationship. Journal of Pineal Research, 2017, 62, e12391.	7.4	149
21	Protective effect of melatonin in a chronic experimental model of Parkinsonâ€™s disease. Brain Research, 2002, 943, 163-173.	2.2	148
22	Melatonin reduces prostate cancer cell growth leading to neuroendocrine differentiation via a receptor and PKA independent mechanism. Prostate, 2005, 63, 29-43.	2.3	142
23	Melatonin, xanthurenic acid, resveratrol, EGCG, vitamin C and Î±â€lipoic acid differentially reduce oxidative DNA damage induced by Fenton reagents: a study of their individual and synergistic actions. Journal of Pineal Research, 2003, 34, 269-277.	7.4	141
24	Melatonin prevents apoptosis induced by 6-hydroxydopamine in neuronal cells: Implications for Parkinson's disease. Journal of Pineal Research, 1998, 24, 179-192.	7.4	138
25	Influence of Inflammation in the Process of T Lymphocyte Differentiation: Proliferative, Metabolic, and Oxidative Changes. Frontiers in Immunology, 2018, 9, 339.	4.8	133
26	Melatonin and Parkinson's Disease. Endocrine, 2005, 27, 169-178.	2.2	129
27	Protection against oxidative protein damage induced by metal-catalyzed reaction or alkylperoxyl radicals: comparative effects of melatonin and other antioxidants. Biochimica Et Biophysica Acta - General Subjects, 2003, 1620, 139-150.	2.4	124
28	The pineal neurohormone melatonin prevents in vivo and in vitro apoptosis in thymocytes. Journal of Pineal Research, 1995, 19, 178-188.	7.4	122
29	Melatonin as a Pharmacological Agent against Neuronal Loss in Experimental Models of Huntington's Disease, Alzheimer's Disease and Parkinsonism. Annals of the New York Academy of Sciences, 1999, 890, 471-485.	3.8	115
30	Melatonin uptake through glucose transporters: a new target for melatonin inhibition of cancer. Journal of Pineal Research, 2015, 58, 234-250.	7.4	114
31	Manganese superoxide dismutase (SOD2/MnSOD)/catalase and SOD2/GPx1 ratios as biomarkers for tumor progression and metastasis in prostate, colon, and lung cancer. Free Radical Biology and Medicine, 2015, 85, 45-55.	2.9	99
32	Redox Signaling and Advanced Glycation Endproducts (AGEs) in Diet-Related Diseases. Antioxidants, 2020, 9, 142.	5.1	98
33	Melatonin: Detoxification of Oxygen And Nitrogen-Based Toxic Reactants. Advances in Experimental Medicine and Biology, 2003, 527, 539-548.	1.6	95
34	Oxidative Damage to Catalase Induced by Peroxyl Radicals: Functional Protection by Melatonin and Other Antioxidants. Free Radical Research, 2003, 37, 543-553.	3.3	93
35	Melatonin regulates glucocorticoid receptor: an answer to its antiapoptotic action in thymus. FASEB Journal, 1999, 13, 1547-1556.	0.5	92
36	Role of pinoline and melatonin in stabilizing hepatic microsomal membranes against oxidative stress. Journal of Bioenergetics and Biomembranes, 1999, 31, 609-616.	2.3	92

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37	Melatonin reduces oxidative neurotoxicity due to quinolinic acid:. Neuropharmacology, 2000, 39, 507-514.	4.1	90
38	Carbon Quantum Dots Codoped with Nitrogen and Lanthanides for Multimodal Imaging. Advanced Functional Materials, 2019, 29, 1903884.	14.9	76
39	Evaluation of the biological effect of Ti generated debris from metal implants: ions and nanoparticles. Metallomics, 2014, 6, 1702-1708.	2.4	72
40	Radical Decisions in Cancer: Redox Control of Cell Growth and Death. Cancers, 2012, 4, 442-474.	3.7	66
41	Antioxidant activity of melatonin in Chinese hamster ovarian cells: changes in cellular proliferation and differentiation. Biochemical and Biophysical Research Communications, 2003, 302, 625-634.	2.1	65
42	Melatonin Ameliorates Neurologic Damage and Neurophysiologic Deficits in Experimental Models of Stroke. Annals of the New York Academy of Sciences, 2003, 993, 35-47.	3.8	61
43	The dark side of glucose transporters in prostate cancer: Are they a new feature to characterize carcinomas?. International Journal of Cancer, 2018, 142, 2414-2424.	5.1	61
44	Melatonin reduces lipid peroxidation and tissue edema in cerulein-induced acute pancreatitis in rats. Digestive Diseases and Sciences, 1999, 44, 2257-2262.	2.3	60
45	GLUT1 protects prostate cancer cells from glucose deprivation-induced oxidative stress. Redox Biology, 2018, 17, 112-127.	9.0	60
46	Several antioxidant pathways are involved in astrocyte protection by melatonin. Journal of Pineal Research, 2002, 33, 204-212.	7.4	59
47	Melatonin transport into mitochondria. Cellular and Molecular Life Sciences, 2017, 74, 3927-3940.	5.4	57
48	Ultrastructural confirmation of neuronal protection by melatonin against the neurotoxin 6-hydroxydopamine cell damage. Brain Research, 1999, 818, 221-227.	2.2	56
49	Critical role of glutathione in melatonin enhancement of tumor necrosis factor and ionizing radiationâ€induced apoptosis in prostate cancer cells in vitro. Journal of Pineal Research, 2008, 45, 258-270.	7.4	55
50	Melatonin prevents glucocorticoid inhibition of cell proliferation and toxicity in hippocampal cells by reducing glucocorticoid receptor nuclear translocation. Journal of Steroid Biochemistry and Molecular Biology, 2008, 110, 116-124.	2.5	55
51	Thioredoxin 1 modulates apoptosis induced by bioactive compounds in prostate cancer cells. Redox Biology, 2017, 12, 634-647.	9.0	55
52	Melatonin, Longevity and Health in the Aged: An Assessment. Free Radical Research, 2002, 36, 1323-1329.	3.3	54
53	Phenotypic changes caused by melatonin increased sensitivity of prostate cancer cells to cytokineâ€induced apoptosis. Journal of Pineal Research, 2013, 54, 33-45.	7.4	53
54	Antioxidant strategies in protection against neurodegenerative disorders. Expert Opinion on Therapeutic Patents, 2003, 13, 1513-1543.	5.0	51

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55	<scp>IGFBP</scp>3 and <scp>MAPK</scp>/<scp>ERK</scp> signaling mediates melatoninâ€induced antitumor activity in prostate cancer. Journal of Pineal Research, 2017, 62, e12373.	7.4	51
56	Interactions between melatonin and nicotinamide nucleotide: NADH preservation in cells and in cellâ€free systems by melatonin. Journal of Pineal Research, 2005, 39, 185-194.	7.4	50
57	Regulation of GLUT Transporters by Flavonoids in Androgen-Sensitive and -Insensitive Prostate Cancer Cells. Endocrinology, 2014, 155, 3238-3250.	2.8	49
58	Melatonin uptake in prostate cancer cells: intracellular transport versus simple passive diffusion. Journal of Pineal Research, 2008, 45, 247-257.	7.4	46
59	Melatonin and its derivatives cyclic 3-hydroxymelatonin, N 1 -acetyl-N 2 -formyl-5-methoxykynuramine and 6-methoxymelatonin reduce oxidative DNA damage induced by Fenton reagents. Journal of Pineal Research, 2003, 34, 178-184.	7.4	44
60	Inhibition of cell proliferation: A mechanism likely to mediate the prevention of neuronal cell death by melatonin. Journal of Pineal Research, 1998, 25, 12-18.	7.4	43
61	Physiological Ischemia/Reperfusion Phenomena and Their Relation to Endogenous Melatonin Production: An Hypothesis. Endocrine, 2005, 27, 149-158.	2.2	40
62	Upregulation of manganese superoxide dismutase (SOD2) is a common pathway for neuroendocrine differentiation in prostate cancer cells. International Journal of Cancer, 2009, 125, 1497-1504.	5.1	38
63	Melatonin Decreases Glucose Metabolism in Prostate Cancer Cells: A 13C Stable Isotope-Resolved Metabolomic Study. International Journal of Molecular Sciences, 2017, 18, 1620.	4.1	38
64	Glutamate induces oxidative stress not mediated by glutamate receptors or cystine transporters: protective effect of melatonin and other antioxidants. Journal of Pineal Research, 2001, 31, 356-362.	7.4	36
65	Expression of the TrkB neurotrophin receptor by thymic macrophages. Immunology, 1998, 94, 235-241.	4.4	35
66	Daily Rhythm of Gene Expression in Rat Superoxide Dismutases. Endocrine Research, 2003, 29, 83-95.	1.2	34
67	Melatonin-Induced Cytoskeleton Reorganization Leads to Inhibition of Melanoma Cancer Cell Proliferation. International Journal of Molecular Sciences, 2020, 21, 548.	4.1	34
68	Advanced glycation end products (AGEs) in oral pathology. Archives of Oral Biology, 2018, 93, 22-30.	1.8	28
69	Melatonin Uptake by Cells: An Answer to Its Relationship with Glucose?. Molecules, 2018, 23, 1999.	3.8	28
70	Apoptosis in primary lymphoid organs with aging. Microscopy Research and Technique, 2003, 62, 524-539.	2.2	27
71	MnSOD drives neuroendocrine differentiation, androgen independence, and cell survival in prostate cancer cells. Free Radical Biology and Medicine, 2011, 50, 525-536.	2.9	27
72	Cellular Uptake and Tissue Biodistribution of Functionalized Gold Nanoparticles and Nanoclusters. Journal of Biomedical Nanotechnology, 2017, 13, 167-179.	1.1	25

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73	5-methoxytryptophol preserves hepatic microsomal membrane fluidity during oxidative stress. , 2000, 76, 651-657.		22
74	Development and hormonal regulation of mast cells in the Harderian gland of Syrian hamsters. Anatomy and Embryology, 1992, 186, 91-97.	1.5	21
75	Monitoring intracellular melatonin levels in human prostate normal and cancer cells by HPLC. Analytical and Bioanalytical Chemistry, 2010, 397, 1235-1244.	3.7	17
76	Advanced glycation end products as biomarkers in systemic diseases: premises and perspectives of salivary advanced glycation end products. Biomarkers in Medicine, 2019, 13, 479-495.	1.4	16
77	Development and validation of new methods for the determination of melatonin and its oxidative metabolites by high performance liquid chromatography and capillary electrophoresis, using multivariate optimization. Journal of Chromatography A, 2010, 1217, 1368-1374.	3.7	15
78	Castration Increases Cell Damage Induced by Porphyrins in the Harderian Gland of Male Syrian Hamster. Necrosis and Not Apoptosis Mediates the Subsequent Cell Death. Journal of Structural Biology, 1996, 116, 377-389.	2.8	14
79	Antioxidants do not prevent acrylonitrile-induced toxicity. Toxicology Letters, 2007, 169, 236-244.	0.8	14
80	Melatonin Enhances Photo-Oxidation of 2â€²,7â€²-Dichlorodihydrofluorescein by an Antioxidant Reaction That Renders N1-Acetyl-N2-Formyl-5-Methoxykynuramine (AFMK). PLoS ONE, 2014, 9, e109257.	2.5	14
81	Androgen-dependent mast cell degranulation in the Harderian gland of female Syrian hamsters: in vivo and organ culture evidence. Anatomy and Embryology, 1997, 196, 133-140.	1.5	13
82	Cytotoxicity and oncostatic activity of the thiazolidinedione derivative CGP 52608 on central nervous system cancer cells. Cancer Letters, 2004, 211, 47-55.	7.2	11
83	Photoacoustic Tomography Detects Response and Resistance to Bevacizumab in Breast Cancer Mouse Models. Cancer Research, 2022, 82, 1658-1668.	0.9	11
84	Cell volume and geometric parameters determination in living cells using confocal microscopy and 3D reconstruction. Protocol Exchange, 0, , .	0.3	10
85	Changes in lipid peroxidation during pregnancy and after delivery in rats: effect of pinealectomy. Reproduction, 2000, , 143-149.	2.6	10
86	Melatonin decreases mRNA for histone h4 in thymus of young rats. Life Sciences, 1998, 63, 1109-1117.	4.3	9
87	Emerging Roles for Browning of White Adipose Tissue in Prostate Cancer Malignant Behaviour. International Journal of Molecular Sciences, 2021, 22, 5560.	4.1	9
88	In Vitro Evaluation of the Toxicological Profile and Oxidative Stress of Relevant Diet-Related Advanced Glycation End Products and Related 1,2-Dicarbonyls. Oxidative Medicine and Cellular Longevity, 2021, 2021, 1-20.	4.0	9
89	Understanding the role of melatonin in cancer metabolism. Melatonin Research, 2019, 2, 76-104.	1.1	7
90	Regulation of the aminolevulinate synthase gene in the Syrian hamster Harderian gland: Changes during development and circadian rhythm and role of some hormones. , 1996, 34, 65-70.		6

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91	Development and validation of a single HPLC method for determination of <i>Î±</i>â€tocopherol in cell culture and in human or mouse biological samples. Biomedical Chromatography, 2015, 29, 843-852.	1.7	6
92	Melatonin from an Antioxidant to a Classic Hormone or a Tissue Factor: Experimental and Clinical Aspects 2019. International Journal of Molecular Sciences, 2020, 21, 3645.	4.1	6
93	Mast cells in the Harderian gland of female syrian hamsters during the estrous cycle and pregnancy: effects of the light/dark cycle. Journal of Reproductive Immunology, 1993, 25, 51-61.	1.9	5
94	Accurate and sensitive determination of molar fractions of 13C-Labeled intracellular metabolites in cell cultures grown in the presence of isotopically-labeled glucose. Analytica Chimica Acta, 2017, 969, 35-48.	5.4	5
95	Androgen-Dependent Prostate Cancer Cells Reprogram Their Metabolic Signature upon GLUT1 Upregulation by Manganese Superoxide Dismutase. Antioxidants, 2022, 11, 313.	5.1	5
96	Beer constituents inhibit prostate cancer cells proliferation. European Journal of Cancer, Supplement, 2008, 6, 142.	2.2	4
97	Evaluation of different internal standardization approaches for the quantification of melatonin in cell culture samples by multiple heart-cutting two dimensional liquid chromatography tandem mass spectrometry. Journal of Chromatography A, 2022, 1663, 462752.	3.7	2
98	GLUT1/GLUT4 balance is a marker of androgen-insensitivity in prostate cancer. European Journal of Cancer, 2016, 61, S41.	2.8	1
99	WIP induces oxidant tolerance in glioblastoma cells through NRF2/KEAP1 axis regulation. Free Radical Biology and Medicine, 2021, 165, 54-55.	2.9	1
100	Apoptotic Signals: Possible Implication of Circadian Rhythms. , 2000, , 203-233.		1
101	MAPK/ERK signaling mediates melatonin-induced neuroendocrine differentiation in prostate cancer cells. European Journal of Cancer, Supplement, 2008, 6, 86.	2.2	0
102	830 Bi-phasic Profile of MnSOD During Tumor Progression in Prostate Cancer. European Journal of Cancer, 2012, 48, S199.	2.8	0
103	1022 Sensitivity of Prostatic Neuroendocrine like Cells to Anti-tumor Drugs. European Journal of Cancer, 2012, 48, S246-S247.	2.8	0
104	Evaluation of sulfur isotopic enrichment of urine metabolites for the differentiation of healthy and prostate cancer mice after the administration of 34S labelled yeast. Journal of Trace Elements in Medicine and Biology, 2017, 39, 155-161.	3.0	0
105	Redox control of the transcriptional circadian rhythmicity by SOD2. Free Radical Biology and Medicine, 2021, 165, 27.	2.9	0
106	Androgen-dependent prostate cancer cells reprogram their metabolic signature upon Glut-1 upregulation by Manganese Superoxide Dismutase (Mnsod/SOD2). Free Radical Biology and Medicine, 2021, 165, 53-54.	2.9	0
107	The role of androgen receptor in glucose transporters expression in prostate cancer cells. Endocrine Abstracts, 0, , .	0.0	0
108	Glucose Transporters Protect Cancer Cells From Nutrient Deprivation. , 2018, , .		0