

# Josefa Hernandez Ruiz

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3280309/publications.pdf>

Version: 2024-02-01

65  
papers

7,124  
citations

81900

39  
h-index

114465

63  
g-index

65  
all docs

65  
docs citations

65  
times ranked

4280  
citing authors

#	ARTICLE	IF	CITATIONS
1	Functions of melatonin in plants: a review. Journal of Pineal Research, 2015, 59, 133-150.	7.4	644
2	Melatonin: A New Plant Hormone and/or a Plant Master Regulator?. Trends in Plant Science, 2019, 24, 38-48.	8.8	548
3	Melatonin: plant growth regulator and/or biostimulator during stress?. Trends in Plant Science, 2014, 19, 789-797.	8.8	502
4	Melatonin and its relationship to plant hormones. Annals of Botany, 2018, 121, 195-207.	2.9	415
5	Protective effect of melatonin against chlorophyll degradation during the senescence of barley leaves. Journal of Pineal Research, 2009, 46, 58-63.	7.4	319
6	An end-point method for estimation of the total antioxidant activity in plant material. Phytochemical Analysis, 1998, 9, 196-202.	2.4	296
7	Melatonin: a growth-stimulating compound present in lupin tissues. Planta, 2004, 220, 140-144.	3.2	289
8	Mechanism of Reaction of Hydrogen Peroxide with Horseradish Peroxidase: Identification of Intermediates in the Catalytic Cycle. Journal of the American Chemical Society, 2001, 123, 11838-11847.	13.7	281
9	Melatonin acts as a growth-stimulating compound in some monocot species. Journal of Pineal Research, 2005, 39, 137-142.	7.4	278
10	Melatonin promotes adventitious- and lateral root regeneration in etiolated hypocotyls of <i>Lupinus albus</i> L.. Journal of Pineal Research, 2007, 42, 147-152.	7.4	247
11	The Physiological Function of Melatonin in Plants. Plant Signaling and Behavior, 2006, 1, 89-95.	2.4	242
12	Spectrophotometric assays for total antioxidant capacity (TAC) in dog serum: an update. BMC Veterinary Research, 2016, 12, 166.	1.9	200
13	Chemical stress by different agents affects the melatonin content of barley roots. Journal of Pineal Research, 2009, 46, 295-299.	7.4	165
14	Inhibition by Ascorbic Acid and Other Antioxidants of the 2,2-Azino-bis(3-ethylbenzthiazoline-6-sulfonic Acid) Oxidation Catalyzed by Peroxidase: A New Approach for Determining Total Antioxidant Status of Foods. Analytical Biochemistry, 1996, 236, 255-261.	2.4	162
15	Melatonin in flowering, fruit set and fruit ripening. Plant Reproduction, 2020, 33, 77-87.	2.2	150
16	Catalase-like activity of horseradish peroxidase: relationship to enzyme inactivation by H <sub>2</sub> O <sub>2</sub> . Biochemical Journal, 2001, 354, 107-114.	3.7	149
17	Growth conditions determine different melatonin levels in <i>Lupinus albus</i> . Journal of Pineal Research, 2013, 55, 149-155.	7.4	142
18	Melatonin and reactive oxygen and nitrogen species: a model for the plant redox network. Melatonin Research, 2019, 2, 152-168.	1.1	118

#	ARTICLE	IF	CITATIONS
19	Growth activity, rooting capacity, and tropism: three auxinic precepts fulfilled by melatonin. <i>Acta Physiologiae Plantarum</i> , 2017, 39, 1.	2.1	104
20	Distribution of Melatonin in Different Zones of Lupin and Barley Plants at Different Ages in the Presence and Absence of Light. <i>Journal of Agricultural and Food Chemistry</i> , 2008, 56, 10567-10573.	5.2	102
21	Is Phytomelatonin a New Plant Hormone?. <i>Agronomy</i> , 2020, 10, 95.	3.0	102
22	Relationship of Melatonin and Salicylic Acid in Biotic/Abiotic Plant Stress Responses. <i>Agronomy</i> , 2018, 8, 33.	3.0	100
23	Growth conditions influence the melatonin content of tomato plants. <i>Food Chemistry</i> , 2013, 138, 1212-1214.	8.2	99
24	Melatonin as a regulatory hub of plant hormone levels and action in stress situations. <i>Plant Biology</i> , 2021, 23, 7-19.	3.8	99
25	Melatonin stimulates the expansion of etiolated lupin cotyledons. <i>Plant Growth Regulation</i> , 2008, 55, 29-34.	3.4	96
26	Catalase-like activity of horseradish peroxidase: relationship to enzyme inactivation by H <sub>2</sub> O <sub>2</sub> . <i>Biochemical Journal</i> , 2001, 354, 107.	3.7	86
27	A comparative study of the purity, enzyme activity, and inactivation by hydrogen peroxide of commercially available horseradish peroxidase isoenzymes A and C. <i>Biotechnology and Bioengineering</i> , 1996, 50, 655-662.	3.3	83
28	A peroxidase isoenzyme secreted by turnip ( <i>Brassica napus</i> ) hairy-root cultures: inactivation by hydrogen peroxide and application in diagnostic kits. <i>Biotechnology and Applied Biochemistry</i> , 2002, 35, 1.	3.1	76
29	The Inactivation and Catalytic Pathways of Horseradish Peroxidase with m-Chloroperoxybenzoic Acid. <i>Journal of Biological Chemistry</i> , 1997, 272, 5469-5476.	3.4	75
30	Reactions of the Class II Peroxidases, Lignin Peroxidase and <i>Arthromyces ramosus</i> Peroxidase, with Hydrogen Peroxide. <i>Journal of Biological Chemistry</i> , 2002, 277, 26879-26885.	3.4	71
31	A Comparative Study of the Inactivation of Wild-Type, Recombinant and Two Mutant Horseradish Peroxidase Isoenzymes C by Hydrogen Peroxide and m-chloroperoxybenzoic Acid. <i>FEBS Journal</i> , 1995, 234, 506-512.	0.2	68
32	The Potential of Phytomelatonin as a Nutraceutical. <i>Molecules</i> , 2018, 23, 238.	3.8	68
33	Phytomelatonin: an unexpected molecule with amazing performances in plants. <i>Journal of Experimental Botany</i> , 2022, 73, 5779-5800.	4.8	62
34	Catalase-like Oxygen Production by Horseradish Peroxidase Must Predominantly Be an Enzyme-Catalyzed Reaction. <i>Archives of Biochemistry and Biophysics</i> , 2001, 392, 295-302.	3.0	56
35	Assessment of different sample processing procedures applied to the determination of melatonin in plants. <i>Phytochemical Analysis</i> , 2009, 20, 14-18.	2.4	53
36	The inactivation of horseradish peroxidase isoenzyme AZ by hydrogen peroxide: an example of partial resistance due to the formation of a stable enzyme intermediate. <i>Journal of Biological Inorganic Chemistry</i> , 2001, 6, 504-516.	2.6	45

#	ARTICLE	IF	CITATIONS
37	Melatonin as a Chemical Substance or as Phytomelatonin Rich-Extracts for Use as Plant Protector and/or Biostimulant in Accordance with EC Legislation. <i>Agronomy</i> , 2019, 9, 570.	3.0	45
38	Role of Melatonin to Enhance Phytoremediation Capacity. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 5293.	2.5	43
39	Melatonin as a plant biostimulant in crops and during post-harvest: a new approach is needed. <i>Journal of the Science of Food and Agriculture</i> , 2021, 101, 5297-5304.	3.5	39
40	Melatonin and Carbohydrate Metabolism in Plant Cells. <i>Plants</i> , 2021, 10, 1917.	3.5	35
41	Phytomelatonin, natural melatonin from plants as a novel dietary supplement: Sources, activities and world market. <i>Journal of Functional Foods</i> , 2018, 48, 37-42.	3.4	33
42	Melatonin against environmental plant stressors: a review. <i>Current Protein and Peptide Science</i> , 2021, 21, 413-429.	1.4	31
43	Melatonin in Plants. <i>Plant Signaling and Behavior</i> , 2007, 2, 381-382.	2.4	30
44	Serum biomarkers of oxidative stress in dogs with idiopathic inflammatory bowel disease. <i>Veterinary Journal</i> , 2017, 221, 56-61.	1.7	29
45	Validation of three automated assays for total antioxidant capacity determination in canine serum samples. <i>Journal of Veterinary Diagnostic Investigation</i> , 2016, 28, 693-698.	1.1	27
46	Validation of an automated assay for the measurement of cupric reducing antioxidant capacity in serum of dogs. <i>BMC Veterinary Research</i> , 2016, 12, 137.	1.9	24
47	Changes in serum biomarkers of oxidative stress after treatment for canine leishmaniosis in sick dogs. <i>Comparative Immunology, Microbiology and Infectious Diseases</i> , 2016, 49, 51-57.	1.6	21
48	Melatonin as a Possible Natural Safener in Crops. <i>Plants</i> , 2022, 11, 890.	3.5	21
49	Development of a Phytomelatonin-Rich Extract from Cultured Plants with Excellent Biochemical and Functional Properties as an Alternative to Synthetic Melatonin. <i>Antioxidants</i> , 2020, 9, 158.	5.1	19
50	Phytomelatonin: Searching for Plants with High Levels for Use as a Natural Nutraceutical. <i>Studies in Natural Products Chemistry</i> , 2015, 46, 519-545.	1.8	17
51	Stability of biomarkers of oxidative stress in canine serum. <i>Research in Veterinary Science</i> , 2018, 121, 85-93.	1.9	15
52	Analytical validation of an automated assay for ferric-reducing ability of plasma in dog serum. <i>Journal of Veterinary Diagnostic Investigation</i> , 2017, 29, 574-578.	1.1	13
53	Inhibition of ACC oxidase activity by melatonin and indole-3-acetic acid in etiolated lupin hypocotyls. , 2007, , 101-103.		13
54	Serum antioxidant capacity and oxidative damage in clinical and subclinical canine ehrlichiosis. <i>Research in Veterinary Science</i> , 2017, 115, 301-306.	1.9	11

#	ARTICLE	IF	CITATIONS
55	Phytomelatonin, an Interesting Tool for Agricultural Crops. Focus on Sciences, 2016, 2, 1-10.	0.2	10
56	The inactivation of horseradish peroxidase by m-chloroperoxybenzoic acid, a xenobiotic hydroperoxide. Journal of Molecular Catalysis A, 1995, 104, 179-191.	4.8	9
57	Characterization of isoperoxidase-B2 inactivation in etiolated <i>Lupinus albus</i> hypocotyls. BBA - Proteins and Proteomics, 2000, 1478, 78-88.	2.1	9
58	Changes in hydrophilic antioxidant activity in <i>Avena sativa</i> and <i>Triticum aestivum</i> leaves of different age during de-etiolation and high-light treatment. Journal of Plant Research, 2006, 119, 321-327.	2.4	9
59	Melatonin in Brassicaceae: Role in Postharvest and Interesting Phytochemicals. Molecules, 2022, 27, 1523.	3.8	9
60	Regulatory Role of Melatonin in the Redox Network of Plants and Plant Hormone Relationship in Stress. Plant in Challenging Environments, 2021, , 235-272.	0.4	6
61	Complexes Between m-chloroperoxybenzoic Acid and Horseradish Peroxidase Compounds I and II: Implications for the Kinetics of Enzyme Inactivation. Journal of Enzyme Inhibition and Medicinal Chemistry, 2002, 17, 287-291.	5.2	4
62	A colorimetric method for the determination of different functional flavonoids using 2,2'-azino-bis-(3-ethylbenzthiazoline-6-sulphonic acid) (ABTS) and peroxidase. Preparative Biochemistry and Biotechnology, 2019, 49, 1033-1039.	1.9	3
63	A Phytomelatonin-Rich Extract Obtained from Selected Herbs with Application as Plant Growth Regulator. Plants, 2021, 10, 2143.	3.5	3
64	Phytomelatonin versus synthetic melatonin in cancer treatments. Biomedical Research and Clinical Practice, 2018, 3, .	0.3	2
65	Phytomelatonin content in <i>Valeriana officinalis</i> L. and some related phytotherapeutic supplements. , 0, , .		2