

# Kyoungwhan Back

## List of Publications by Year in descending order

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times ranked

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#	ARTICLE	IF	CITATIONS
1	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.	3.4	333
2	Melatonin as a signal molecule triggering defense responses against pathogen attack in <i>Arabidopsis</i> and tobacco. <i>Journal of Pineal Research</i> , 2014, 57, 262-268.	3.4	221
3	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.	3.4	219
4	Melatonin-rich transgenic rice plants exhibit resistance to herbicide-induced oxidative stress. <i>Journal of Pineal Research</i> , 2013, 54, 258-263.	3.4	208
5	<i>Arabidopsis</i> 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, 291-299.	3.4	185
6	Characterization of rice tryptophan decarboxylases and their direct involvement in serotonin biosynthesis in transgenic rice. <i>Planta</i> , 2007, 227, 263-272.	1.6	175
7	Melatonin promotes seminal root elongation and root growth in transgenic rice after germination. <i>Journal of Pineal Research</i> , 2012, 53, 385-389.	3.4	175
8	Melatonin synthesis in rice seedlings in vivo is enhanced at high temperatures and under dark conditions due to increased serotonin N-acetyltransferase and N-acetylserotonin methyltransferase activities. <i>Journal of Pineal Research</i> , 2014, 56, 189-195.	3.4	172
9	Senescence-Induced Serotonin Biosynthesis and Its Role in Delaying Senescence in Rice Leaves. <i>Plant Physiology</i> , 2009, 150, 1380-1393.	2.3	163
10	Molecular cloning of rice serotonin N-acetyltransferase, the penultimate gene in plant melatonin biosynthesis. <i>Journal of Pineal Research</i> , 2013, 55, 7-13.	3.4	160
11	Enhanced production of melatonin by ectopic overexpression of human serotonin N-acetyltransferase plays a role in cold resistance in transgenic rice seedlings. <i>Journal of Pineal Research</i> , 2010, 49, no-no.	3.4	159
12	An increase in melatonin in transgenic rice causes pleiotropic phenotypes, including enhanced seedling growth, delayed flowering, and low grain yield. <i>Journal of Pineal Research</i> , 2014, 56, 408-414.	3.4	151
13	Molecular cloning of a plant N-acetylserotonin methyltransferase and its expression characteristics in rice. <i>Journal of Pineal Research</i> , 2011, 50, 304-309.	3.4	147
14	Melatonin is required for H <sub>2</sub> O <sub>2</sub> and NO-mediated defense signaling through MAPKKK3 and OXI1 in <i>Arabidopsis thaliana</i> . <i>Journal of Pineal Research</i> , 2017, 62, e12379.	3.4	147
15	Mitogen-activated protein kinase pathways are required for melatonin-mediated defense responses in plants. <i>Journal of Pineal Research</i> , 2016, 60, 327-335.	3.4	141
16	Caffeic acid O-methyltransferase is involved in the synthesis of melatonin by methylating N-acetylserotonin in <i>Arabidopsis</i> . <i>Journal of Pineal Research</i> , 2014, 57, 219-227.	3.4	140
17	Cellular localization and kinetics of the rice melatonin biosynthetic enzymes SNAT and ASMT. <i>Journal of Pineal Research</i> , 2014, 56, 107-114.	3.4	135
18	Coordinated regulation of melatonin synthesis and degradation genes in rice leaves in response to cadmium treatment. <i>Journal of Pineal Research</i> , 2015, 58, 470-478.	3.4	132

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19	Melatonin metabolism, signaling and possible roles in plants. <i>Plant Journal</i> , 2021, 105, 376-391.	2.8	127
20	Cloning of <i>Arabidopsis thaliana</i> serotonin <i>N</i> -acetyltransferase and its role with caffeic acid <i>O</i> -methyltransferase in the biosynthesis of melatonin in vitro despite their different subcellular localizations. <i>Journal of Pineal Research</i> , 2014, 57, 418-426.	3.4	120
21	Overexpression of rice serotonin <i>N</i> -acetyltransferase 1 in transgenic rice plants confers resistance to cadmium and senescence and increases grain yield. <i>Journal of Pineal Research</i> , 2017, 62, e12392.	3.4	119
22	Tryptamine 5-hydroxylase-deficient Sekiguchi rice induces synthesis of 5-hydroxytryptophan and <i>N</i> -acetyltryptamine but decreases melatonin biosynthesis during senescence process of detached leaves. <i>Journal of Pineal Research</i> , 2012, 52, 211-216.	3.4	111
23	Melatonin biosynthesis requires <i>N</i> -acetylserotonin methyltransferase activity of caffeic acid <i>O</i> -methyltransferase in rice. <i>Journal of Experimental Botany</i> , 2015, 66, 6917-6925.	2.4	106
24	Light-regulated melatonin biosynthesis in rice during the senescence process in detached leaves. <i>Journal of Pineal Research</i> , 2012, 53, 107-111.	3.4	104
25	Functional analyses of three ASMT gene family members in rice plants. <i>Journal of Pineal Research</i> , 2013, 55, 409-415.	3.4	104
26	Cloning and functional characterization of the <i>Arabidopsis thaliana</i> <i>N</i> -acetylserotonin <i>O</i> -methyltransferase responsible for melatonin synthesis. <i>Journal of Pineal Research</i> , 2016, 60, 65-73.	3.4	104
27	Elevated production of melatonin in transgenic rice seeds expressing rice tryptophan decarboxylase. <i>Journal of Pineal Research</i> , 2014, 56, 275-282.	3.4	99
28	Porphyryn Biosynthesis Control under Water Stress: Sustained Porphyryn Status Correlates with Drought Tolerance in Transgenic Rice. <i>Plant Physiology</i> , 2011, 157, 1746-1764.	2.3	92
29	Low melatonin production by suppression of either serotonin <i>N</i> -acetyltransferase or <i>N</i> -acetylserotonin methyltransferase in rice causes seedling growth retardation with yield penalty, abiotic stress susceptibility, and enhanced coleoptile growth under anoxic conditions. <i>Journal of Pineal Research</i> , 2016, 60, 348-359.	3.4	91
30	HPLC Analysis of Serotonin, Tryptamine, Tyramine, and the Hydroxycinnamic Acid Amides of Serotonin and Tyramine in Food Vegetables. <i>Journal of Medicinal Food</i> , 2008, 11, 385-389.	0.8	88
31	Molecular cloning of melatonin 2-hydroxylase responsible for 2-hydroxymelatonin production in rice ( <i>Oryza sativa</i> ). <i>Journal of Pineal Research</i> , 2015, 58, 343-351.	3.4	85
32	Cadmium-induced melatonin synthesis in rice requires light, hydrogen peroxide, and nitric oxide: Key regulatory roles for tryptophan decarboxylase and caffeic acid <i>O</i> -methyltransferase. <i>Journal of Pineal Research</i> , 2017, 63, e12441.	3.4	79
33	Molecular cloning and functional analysis of serotonin <i>N</i> -acetyltransferase from the cyanobacterium <i>Synechocystis</i> sp. <i>PCC</i> 6803. <i>Journal of Pineal Research</i> , 2013, 55, 371-376.	3.4	77
34	Predominance of 2-hydroxymelatonin over melatonin in plants. <i>Journal of Pineal Research</i> , 2015, 59, 448-454.	3.4	74
35	2-Hydroxymelatonin promotes the resistance of rice plant to multiple simultaneous abiotic stresses (combined cold and drought). <i>Journal of Pineal Research</i> , 2016, 61, 303-316.	3.4	73
36	Pre-Steady-State Study of Recombinant Sesquiterpene Cyclases. <i>Biochemistry</i> , 1997, 36, 8340-8348.	1.2	72

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37	Biosynthesis and biotechnological production of serotonin derivatives. <i>Applied Microbiology and Biotechnology</i> , 2009, 83, 27-34.	1.7	69
38	Chloroplast overexpression of rice caffeic acid O-methyltransferase increases melatonin production in chloroplasts via the 5-methoxytryptamine pathway in transgenic rice plants. <i>Journal of Pineal Research</i> , 2017, 63, e12412.	3.4	69
39	Melatonin is involved in skotomorphogenesis by regulating brassinosteroid biosynthesis in rice plants. <i>Journal of Pineal Research</i> , 2018, 65, e12495.	3.4	69
40	Molecular cloning of melatonin 3-hydroxylase and its production of cyclic 3-hydroxymelatonin in rice ( <i>Oryza sativa</i> ). <i>Journal of Pineal Research</i> , 2016, 61, 470-478.	3.4	67
41	Cloning and characterization of the serotonin N-acetyltransferase gene (SNAT2) in rice ( <i>Oryza sativa</i> ). <i>Journal of Pineal Research</i> , 2016, 61, 198-207.	3.4	64
42	Microarray analysis of genes differentially expressed in melatonin-rich transgenic rice expressing a sheep serotonin N-acetyltransferase. <i>Journal of Pineal Research</i> , 2013, 55, 357-363.	3.4	61
43	Cloning and Characterization of a Hydroxycinnamoyl-CoA:Tyramine N-(Hydroxycinnamoyl)Transferase Induced in Response to UV-C and Wounding from <i>Capsicum annum</i> . <i>Plant and Cell Physiology</i> , 2001, 42, 475-481.	1.5	60
44	Production of Coumaroylserotonin and Feruloylserotonin in Transgenic Rice Expressing Pepper Hydroxycinnamoyl-Coenzyme A:Serotonin N-(Hydroxycinnamoyl)transferase. <i>Plant Physiology</i> , 2004, 135, 346-356.	2.3	59
45	Rice histone deacetylase 10 and Arabidopsis histone deacetylase 14 genes encode N-acetylserotonin deacetylase, which catalyzes conversion of N-acetylserotonin into serotonin, a reverse reaction for melatonin biosynthesis in plants. <i>Journal of Pineal Research</i> , 2018, 64, e12460.	3.4	57
46	Transcriptional suppression of tryptamine 5-hydroxylase, a terminal serotonin biosynthetic gene, induces melatonin biosynthesis in rice ( <i>Oryza sativa</i> L.). <i>Journal of Pineal Research</i> , 2013, 55, 131-137.	3.4	56
47	Melatonin-deficient rice plants show a common semidwarf phenotype either dependent or independent of brassinosteroid biosynthesis. <i>Journal of Pineal Research</i> , 2019, 66, e12537.	3.4	54
48	Toxic tetrapyrrole accumulation in protoporphyrinogen IX oxidase-overexpressing transgenic rice plants. <i>Plant Molecular Biology</i> , 2008, 67, 535-546.	2.0	53
49	Kinetic analysis of purified recombinant rice N-acetylserotonin methyltransferase and peak melatonin production in etiolated rice shoots. <i>Journal of Pineal Research</i> , 2013, 54, 139-144.	3.4	53
50	Knockout of Arabidopsis Serotonin N-Acetyltransferase-2 Reduces Melatonin Levels and Delays Flowering. <i>Biomolecules</i> , 2019, 9, 712.	1.8	52
51	Transient induction of melatonin biosynthesis in rice ( <i>Oryza sativa</i> L.) during the reproductive stage. <i>Journal of Pineal Research</i> , 2013, 55, 40-45.	3.4	51
52	Chloroplast-encoded serotonin N-acetyltransferase in the red alga <i>Pyropia yezoensis</i> : gene transition to the nucleus from chloroplasts. <i>Journal of Experimental Botany</i> , 2015, 66, 709-717.	2.4	51
53	Melatonin induction and its role in high light stress tolerance in <i>Arabidopsis thaliana</i> . <i>Journal of Pineal Research</i> , 2018, 65, e12504.	3.4	51
54	Enzymatic features of serotonin biosynthetic enzymes and serotonin biosynthesis in plants. <i>Plant Signaling and Behavior</i> , 2008, 3, 389-390.	1.2	50

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55	Conversion of 5-Hydroxytryptophan into Serotonin by Tryptophan Decarboxylase in Plants, <i>Escherichia coli</i> , and Yeast. <i>Bioscience, Biotechnology and Biochemistry</i> , 2008, 72, 2456-2458.	0.6	49
56	Induction of serotonin biosynthesis is uncoupled from the coordinated induction of tryptophan biosynthesis in pepper fruits ( <i>Capsicum annuum</i> ) upon pathogen infection. <i>Planta</i> , 2009, 230, 1197-1206.	1.6	49
57	Production of serotonin by dual expression of tryptophan decarboxylase and tryptamine 5-hydroxylase in <i>Escherichia coli</i> . <i>Applied Microbiology and Biotechnology</i> , 2011, 89, 1387-1394.	1.7	49
58	Overexpression of a Defensin Enhances Resistance to a Fruit-Specific Anthracnose Fungus in Pepper. <i>PLoS ONE</i> , 2014, 9, e97936.	1.1	49
59	The phyto-melatonin receptor (PMRT1) <i>Arabidopsis</i> Cand2 is not a bona fide G protein-coupled melatonin receptor. <i>Melatonin Research</i> , 2020, 3, 177-186.	0.7	43
60	Cloning and characterization of a serotonin N-acetyltransferase from a gymnosperm, loblolly pine ( <i>Pinus taeda</i> ). <i>Journal of Pineal Research</i> , 2014, 57, 348-355.	3.4	40
61	2-Hydroxymelatonin confers tolerance against combined cold and drought stress in tobacco, tomato, and cucumber as a potent anti-stress compound in the evolution of land plants. <i>Melatonin Research</i> , 2019, 2, 35-46.	0.7	39
62	Novel major quantitative trait loci regulating the content of isoflavone in soybean seeds. <i>Genes and Genomics</i> , 2011, 33, 685-692.	0.5	38
63	Functional Analysis of the Amine Substrate Specificity Domain of Pepper Tyramine and Serotonin N-Hydroxycinnamoyltransferases. <i>Plant Physiology</i> , 2006, 140, 704-715.	2.3	37
64	Increased expression of Fe-chelatase leads to increased metabolic flux into heme and confers protection against photodynamically induced oxidative stress. <i>Plant Molecular Biology</i> , 2014, 86, 271-287.	2.0	37
65	Cadmium Disrupts Subcellular Organelles, Including Chloroplasts, Resulting in Melatonin Induction in Plants. <i>Molecules</i> , 2017, 22, 1791.	1.7	36
66	Melatonin production in <i>Escherichia coli</i> by dual expression of serotonin N-acetyltransferase and caffeic acid O-methyltransferase. <i>Applied Microbiology and Biotechnology</i> , 2016, 100, 6683-6691.	1.7	34
67	Methanol is an endogenous elicitor molecule for the synthesis of tryptophan and tryptophan-derived secondary metabolites upon senescence of detached rice leaves. <i>Plant Journal</i> , 2011, 66, 247-257.	2.8	33
68	Melatonin Deficiency Confers Tolerance to Multiple Abiotic Stresses in Rice via Decreased Brassinosteroid Levels. <i>International Journal of Molecular Sciences</i> , 2019, 20, 5173.	1.8	32
69	Herbicidal and antioxidant responses of transgenic rice overexpressing <i>Myxococcus xanthus</i> protoporphyrinogen oxidase. <i>Plant Physiology and Biochemistry</i> , 2005, 43, 423-430.	2.8	30
70	A rice chloroplast transit peptide sequence does not alter the cytoplasmic localization of sheep serotonin N-acetyltransferase expressed in transgenic rice plants. <i>Journal of Pineal Research</i> , 2014, 57, 147-154.	3.4	30
71	Flavonoids inhibit both rice and sheep serotonin N-acetyltransferases and reduce melatonin levels in plants. <i>Journal of Pineal Research</i> , 2018, 65, e12512.	3.4	30
72	Suppression of Melatonin 2-Hydroxylase Increases Melatonin Production Leading to the Enhanced Abiotic Stress Tolerance against Cadmium, Senescence, Salt, and Tunicamycin in Rice Plants. <i>Biomolecules</i> , 2019, 9, 589.	1.8	30

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73	Enriched production of N-hydroxycinnamic acid amides and biogenic amines in pepper ( <i>Capsicum</i> ) Tj ETQq1 1 0.784314 rgBT/Overlook	1.7	29
74	Chloroplastic and cytoplasmic overexpression of sheep serotonin N-acetyltransferase in transgenic rice plants is associated with low melatonin production despite high enzyme activity. <i>Journal of Pineal Research</i> , 2015, 58, 461-469.	3.4	29
75	Melatonin plays a pivotal role in conferring tolerance against endoplasmic reticulum stress via mitogen-activated protein kinases and bZIP60 in <i>Arabidopsis thaliana</i> . <i>Melatonin Research</i> , 2018, 1, 94-108.	0.7	29
76	Resistance pattern and antioxidant enzyme profiles of protoporphyrinogen oxidase (PROTOX) inhibitor-resistant transgenic rice. <i>Pesticide Biochemistry and Physiology</i> , 2008, 91, 53-65.	1.6	28
77	Melatonin Regulates Chloroplast Protein Quality Control via a Mitogen-Activated Protein Kinase Signaling Pathway. <i>Antioxidants</i> , 2021, 10, 511.	2.2	28
78	Cytoprotective activities of hydroxycinnamic acid amides of serotonin against oxidative stress-induced damage in HepG2 and HaCaT cells. <i>FÅ-toterapÅ-Åç</i> , 2010, 81, 1134-1141.	1.1	23
79	Simultaneous Suppression of Two Distinct Serotonin N-Acetyltransferase Isogenes by RNA Interference Leads to Severe Decreases in Melatonin and Accelerated Seed Deterioration in Rice. <i>Biomolecules</i> , 2020, 10, 141.	1.8	22
80	2-Hydroxymelatonin, Rather Than Melatonin, Is Responsible for RBOH-Dependent Reactive Oxygen Species Production Leading to Premature Senescence in Plants. <i>Antioxidants</i> , 2021, 10, 1728.	2.2	22
81	Partial Characterization of Farnesyl and Geranylgeranyl Diphosphatases Induced in Rice Seedlings by UV-C Irradiation. <i>Plant and Cell Physiology</i> , 2001, 42, 864-867.	1.5	21
82	Enhanced nutraceutical serotonin derivatives of rice seed by hydroxycinnamoyl-CoA:serotonin N-(hydroxycinnamoyl)transferase. <i>Plant Science</i> , 2005, 168, 783-788.	1.7	20
83	Gene flow from herbicide-tolerant GM rice and the heterosis of GM rice-weed F2 progeny. <i>Planta</i> , 2011, 233, 807-815.	1.6	20
84	Effects of Light Quality and Phytochrome Form on Melatonin Biosynthesis in Rice. <i>Biomolecules</i> , 2020, 10, 523.	1.8	20
85	Expression of serotonin derivative synthetic genes on a single self-processing polypeptide and the production of serotonin derivatives in microbes. <i>Applied Microbiology and Biotechnology</i> , 2008, 81, 43-49.	1.7	19
86	2-Hydroxymelatonin, a Predominant Hydroxylated Melatonin Metabolite in Plants, Shows Antitumor Activity against Human Colorectal Cancer Cells. <i>Molecules</i> , 2017, 22, 453.	1.7	17
87	Cloning of a Sesquiterpene Cyclase and Its Functional Expression by Domain Swapping Strategy. <i>Molecules and Cells</i> , 2000, 10, 220-225.	1.0	16
88	Cyclic 3-hydroxymelatonin exhibits diurnal rhythm and cyclic 3-hydroxymelatonin overproduction increases secondary tillers in rice by upregulating MOC1 expression. <i>Melatonin Research</i> , 2019, 2, 120-138.	0.7	16
89	Phytomelatonin as a signaling molecule for protein quality control via chaperone, autophagy, and ubiquitin-proteasome systems in plants. <i>Journal of Experimental Botany</i> , 2022, 73, 5863-5873.	2.4	16
90	Use of <i>Myxococcus xanthus</i> protoporphyrinogen oxidase as a selectable marker for transformation of rice. <i>Pesticide Biochemistry and Physiology</i> , 2007, 88, 31-35.	1.6	15

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91	Two-year field study shows little evidence that PPO-transgenic rice affects the structure of soil microbial communities. <i>Biology and Fertility of Soils</i> , 2012, 48, 453-461.	2.3	15
92	Pathogen resistance of transgenic rice plants expressing mitogen-activated protein kinase 1, MK1, from <i>Capsicum annuum</i> . <i>Molecules and Cells</i> , 2004, 17, 81-5.	1.0	15
93	Responses of MxPPO overexpressing transgenic tall fescue plants to two diphenyl-ether herbicides, oxyfluorfen and acifluorfen. <i>Acta Physiologiae Plantarum</i> , 2008, 30, 745-754.	1.0	14
94	Production of phenylpropanoid amides in recombinant <i>Escherichia coli</i> . <i>Metabolic Engineering</i> , 2009, 11, 64-68.	3.6	14
95	Tyramine accumulation in rice cells caused a dwarf phenotype via reduced cell division. <i>Planta</i> , 2011, 233, 251-260.	1.6	14
96	Enhanced synthesis of feruloyltyramine and 4-coumaroyltyramine is associated with tyramine availability in transgenic rice expressing pepper tyramine N-hydroxycinnamoyltransferase. <i>Plant Science</i> , 2007, 172, 57-63.	1.7	13
97	Endosperm-specific expression of tyramine N-hydroxycinnamoyltransferase and tyrosine decarboxylase from a single self-processing polypeptide produces high levels of tyramine derivatives in rice seeds. <i>Biotechnology Letters</i> , 2009, 31, 911-915.	1.1	13
98	Rice P450 reductases differentially affect P450-mediated metabolism in bacterial expression systems. <i>Bioprocess and Biosystems Engineering</i> , 2013, 36, 325-331.	1.7	13
99	2-Hydroxymelatonin Promotes Seed Germination by Increasing Reactive Oxygen Species Production and Gibberellin Synthesis in <i>Arabidopsis thaliana</i> . <i>Antioxidants</i> , 2022, 11, 737.	2.2	13
100	Modifying <i>Myxococcus xanthus</i> protoporphyrinogen oxidase to plant codon usage and high level of oxyfluorfen resistance in transgenic rice. <i>Pesticide Biochemistry and Physiology</i> , 2006, 86, 186-194.	1.6	12
101	Ectopic expression of serotonin N-hydroxycinnamoyltransferase and differential production of phenylpropanoid amides in transgenic tomato tissues. <i>Scientia Horticulturae</i> , 2009, 120, 504-510.	1.7	12
102	Enhanced octopamine synthesis through the ectopic expression of tyrosine decarboxylase in rice plants. <i>Plant Science</i> , 2009, 176, 46-50.	1.7	12
103	Induced synthesis of caffeoylserotonin in pepper fruits upon infection by the anthracnose fungus, <i>Colletotrichum gloeosporioides</i> . <i>Scientia Horticulturae</i> , 2010, 124, 290-293.	1.7	12
104	Production of ketocarotenoids in transgenic carrot plants with an enhanced level of $\beta$ -carotene. <i>Plant Biotechnology Reports</i> , 2012, 6, 133-140.	0.9	12
105	Functional Characterization of Serotonin N-Acetyltransferase in Archaeon <i>Thermoplasma volcanium</i> . <i>Antioxidants</i> , 2022, 11, 596.	2.2	12
106	Exogenous Gibberellin Treatment Enhances Melatonin Synthesis for Melatonin-Enriched Rice Production. <i>Biomolecules</i> , 2022, 12, 198.	1.8	11
107	Developmentally Regulated Sesquiterpene Production Confers Resistance to <i>Colletotrichum gloeosporioides</i> in Ripe Pepper Fruits. <i>PLoS ONE</i> , 2014, 9, e109453.	1.1	10
108	Suppression of Rice Cryptochrome 1b Decreases Both Melatonin and Expression of Brassinosteroid Biosynthetic Genes Resulting in Salt Tolerance. <i>Molecules</i> , 2021, 26, 1075.	1.7	10

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109	Rice N-acetylserotonin deacetylase regulates melatonin levels in transgenic rice. <i>Melatonin Research</i> , 2020, 3, 32-42.	0.7	10
110	Either Soluble or Plastidic Expression of Recombinant Protoporphyrinogen Oxidase Modulates Tetrapyrrole Biosynthesis and Photosynthetic Efficiency in Transgenic Rice. <i>Bioscience, Biotechnology and Biochemistry</i> , 2003, 67, 1472-1478.	0.6	8
111	Overexpression of Rice Ferrochelatase I and II Leads to Increased Susceptibility to Oxyfluorfen Herbicide in Transgenic Rice. <i>Journal of Plant Biology</i> , 2010, 53, 291-296.	0.9	8
112	Protoporphyrinogen Oxidase“Overexpressing Transgenic Rice is Resistant to Drought Stress. <i>Crop Science</i> , 2013, 53, 1076-1085.	0.8	8
113	Expression of recombinant protoporphyrinogen oxidase influences growth and morphological characteristics in transgenic rice. <i>Plant Growth Regulation</i> , 2004, 42, 283-288.	1.8	7
114	Endosperm-Specific Expression of Serotonin N-Hydroxycinnamoyltransferase in Rice. <i>Plant Foods for Human Nutrition</i> , 2008, 63, 53-57.	1.4	7
115	Functional characterization of tobacco ( <i>Nicotiana benthamiana</i> ) serotonin N-acetyltransferases (NbSNAT1 and NbSNAT2). <i>Melatonin Research</i> , 2021, 4, 507-521.	0.7	7
116	The Antioxidant Cyclic 3-Hydroxymelatonin Promotes the Growth and Flowering of <i>Arabidopsis thaliana</i> . <i>Antioxidants</i> , 2022, 11, 1157.	2.2	7
117	Strategies to generate melatonin-enriched transgenic rice to respond to the adverse effects on rice production potentially caused by global warming. <i>Melatonin Research</i> , 2021, 4, 501-506.	0.7	6
118	Molecular Regulation of Antioxidant Melatonin Biosynthesis by Brassinosteroid Acting as an Endogenous Elicitor of Melatonin Induction in Rice Seedlings. <i>Antioxidants</i> , 2022, 11, 918.	2.2	6
119	The characterization of transgenic rice plants expressing a pepper 5- aristolochene synthase, the first committed step enzyme for capsidiol synthesis in isoprenoid pathway. <i>Plant Science</i> , 2004, 166, 881-887.	1.7	5
120	Production of plant-specific tyramine derivatives by dual expression of tyramine N-hydroxycinnamoyltransferase and 4-coumarate:coenzyme A ligase in <i>Escherichia coli</i> . <i>Biotechnology Letters</i> , 2009, 31, 1469-1475.	1.1	5
121	Induced tyramine overproduction in transgenic rice plants expressing a rice tyrosine decarboxylase under the control of methanol-inducible rice tryptophan decarboxylase promoter. <i>Bioprocess and Biosystems Engineering</i> , 2012, 35, 205-210.	1.7	4
122	Fitness cost and competitive ability of transgenic herbicide-tolerant rice expressing a protoporphyrinogen oxidase gene. <i>Journal of Ecology and Environment</i> , 2013, 36, 39-47.	1.6	4
123	Ectopic expression of MAP kinase inhibits germination and seedling growth in transgenic rice. <i>Plant Growth Regulation</i> , 2005, 45, 251-257.	1.8	3
124	Tryptophan Boost Caused by Senescence Occurred Independently of Cytoplasmic Glutamine Synthetase. <i>Bioscience, Biotechnology and Biochemistry</i> , 2010, 74, 2352-2354.	0.6	3
125	Methanol elicits the biosynthesis of 4-coumaroylserotonin and feruloylserotonin in rice seedlings. <i>Plant Signaling and Behavior</i> , 2011, 6, 881-883.	1.2	3
126	Inhibition of Rice Serotonin N-Acetyltransferases by MG149 Decreased Melatonin Synthesis in Rice Seedlings. <i>Biomolecules</i> , 2021, 11, 658.	1.8	2



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127	Phenotype Comparison between Herbicide Tolerant Transgenic Rice and Weedy Rice. Weed & Turfgrass Science, 2013, 2, 15-22.	0.1	1
128	Arthropod Diversity and Community Structure in Fields of Non-genetically Modified (GM) and Herbicide-tolerant GM Rice. Korean Journal of Applied Entomology, 2015, , 335-343.	0.3	1