

# Kyoungwhan Back

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/4213345/kyoungwhan-back-publications-by-citations.pdf>

**Version:** 2024-04-19

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

124  
papers

5,256  
citations

44  
h-index

68  
g-index

128  
ext. papers

6,356  
ext. citations

6.5  
avg, IF

6.5  
L-index

#	Paper	IF	Citations
124	Melatonin biosynthesis in plants: multiple pathways catalyze tryptophan to melatonin in the cytoplasm or chloroplasts. <i>Journal of Pineal Research</i> , <b>2016</b> , 61, 426-437	10.4	187
123	Melatonin-rich transgenic rice plants exhibit resistance to herbicide-induced oxidative stress. <i>Journal of Pineal Research</i> , <b>2013</b> , 54, 258-63	10.4	165
122	Melatonin as a signal molecule triggering defense responses against pathogen attack in Arabidopsis and tobacco. <i>Journal of Pineal Research</i> , <b>2014</b> , 57, 262-8	10.4	158
121	On the significance of an alternate pathway of melatonin synthesis via 5-methoxytryptamine: comparisons across species. <i>Journal of Pineal Research</i> , <b>2016</b> , 61, 27-40	10.4	150
120	Characterization of rice tryptophan decarboxylases and their direct involvement in serotonin biosynthesis in transgenic rice. <i>Planta</i> , <b>2007</b> , 227, 263-72	4.7	146
119	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> , <b>2010</b> , 49, 176-82	10.4	139
118	Melatonin promotes seminal root elongation and root growth in transgenic rice after germination. <i>Journal of Pineal Research</i> , <b>2012</b> , 53, 385-9	10.4	129
117	Molecular cloning of rice serotonin N-acetyltransferase, the penultimate gene in plant melatonin biosynthesis. <i>Journal of Pineal Research</i> , <b>2013</b> , 55, 7-13	10.4	129
116	Senescence-induced serotonin biosynthesis and its role in delaying senescence in rice leaves. <i>Plant Physiology</i> , <b>2009</b> , 150, 1380-93	6.6	125
115	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> , <b>2015</b> , 58, 291-9	10.4	124
114	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> , <b>2014</b> , 56, 189-95	10.4	120
113	Molecular cloning of a plant N-acetylserotonin methyltransferase and its expression characteristics in rice. <i>Journal of Pineal Research</i> , <b>2011</b> , 50, 304-9	10.4	116
112	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> , <b>2014</b> , 56, 408-14	10.4	108
111	Cellular localization and kinetics of the rice melatonin biosynthetic enzymes SNAT and ASMT. <i>Journal of Pineal Research</i> , <b>2014</b> , 56, 107-14	10.4	105
110	Caffeic acid O-methyltransferase is involved in the synthesis of melatonin by methylating N-acetylserotonin in Arabidopsis. <i>Journal of Pineal Research</i> , <b>2014</b> , 57, 219-27	10.4	97
109	Coordinated regulation of melatonin synthesis and degradation genes in rice leaves in response to cadmium treatment. <i>Journal of Pineal Research</i> , <b>2015</b> , 58, 470-8	10.4	94
108	Overexpression of rice serotonin N-acetyltransferase 1 in transgenic rice plants confers resistance to cadmium and senescence and increases grain yield. <i>Journal of Pineal Research</i> , <b>2017</b> , 62, e12392	10.4	90

107	Tryptamine 5-hydroxylase-deficient Sekiguchi rice induces synthesis of 5-hydroxytryptophan and N-acetyltryptamine but decreases melatonin biosynthesis during senescence process of detached leaves. <i>Journal of Pineal Research</i> , <b>2012</b> , 52, 211-6	10.4	88
106	Cloning of Arabidopsis serotonin N-acetyltransferase and its role with caffeic acid O-methyltransferase in the biosynthesis of melatonin in vitro despite their different subcellular localizations. <i>Journal of Pineal Research</i> , <b>2014</b> , 57, 418-26	10.4	87
105	Melatonin is required for H <sub>2</sub> O <sub>2</sub> - and NO-mediated defense signaling through MAPKKK3 and OXI1 in Arabidopsis thaliana. <i>Journal of Pineal Research</i> , <b>2017</b> , 62, e12379	10.4	86
104	Light-regulated melatonin biosynthesis in rice during the senescence process in detached leaves. <i>Journal of Pineal Research</i> , <b>2012</b> , 53, 107-11	10.4	85
103	Mitogen-activated protein kinase pathways are required for melatonin-mediated defense responses in plants. <i>Journal of Pineal Research</i> , <b>2016</b> , 60, 327-35	10.4	85
102	Elevated production of melatonin in transgenic rice seeds expressing rice tryptophan decarboxylase. <i>Journal of Pineal Research</i> , <b>2014</b> , 56, 275-82	10.4	78
101	Functional analyses of three ASMT gene family members in rice plants. <i>Journal of Pineal Research</i> , <b>2013</b> , 55, 409-15	10.4	78
100	Melatonin biosynthesis requires N-acetylserotonin methyltransferase activity of caffeic acid O-methyltransferase in rice. <i>Journal of Experimental Botany</i> , <b>2015</b> , 66, 6917-25	7	76
99	HPLC analysis of serotonin, tryptamine, tyramine, and the hydroxycinnamic acid amides of serotonin and tyramine in food vegetables. <i>Journal of Medicinal Food</i> , <b>2008</b> , 11, 385-9	2.8	76
98	Porphyrin biosynthesis control under water stress: sustained porphyrin status correlates with drought tolerance in transgenic rice. <i>Plant Physiology</i> , <b>2011</b> , 157, 1746-64	6.6	75
97	Cloning and functional characterization of the Arabidopsis N-acetylserotonin O-methyltransferase responsible for melatonin synthesis. <i>Journal of Pineal Research</i> , <b>2016</b> , 60, 65-73	10.4	71
96	Pre-steady-state study of recombinant sesquiterpene cyclases. <i>Biochemistry</i> , <b>1997</b> , 36, 8340-8	3.2	67
95	Low melatonin production by suppression of either serotonin N-acetyltransferase or N-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> , <b>2016</b> , 60, 348-59	10.4	66
94	Molecular cloning and functional analysis of serotonin N-acetyltransferase from the cyanobacterium Synechocystis sp. PCC 6803. <i>Journal of Pineal Research</i> , <b>2013</b> , 55, 371-6	10.4	65
93	Biosynthesis and biotechnological production of serotonin derivatives. <i>Applied Microbiology and Biotechnology</i> , <b>2009</b> , 83, 27-34	5.7	56
92	Production of coumaroylserotonin and feruloylserotonin in transgenic rice expressing pepper hydroxycinnamoyl-coenzyme A:serotonin N-(hydroxycinnamoyl)transferase. <i>Plant Physiology</i> , <b>2004</b> , 135, 346-56	6.6	56
91	Microarray analysis of genes differentially expressed in melatonin-rich transgenic rice expressing a sheep serotonin N-acetyltransferase. <i>Journal of Pineal Research</i> , <b>2013</b> , 55, 357-63	10.4	54
90	Cloning and characterization of a hydroxycinnamoyl-CoA:tyramine N-(hydroxycinnamoyl)transferase induced in response to UV-C and wounding from Capsicum annum. <i>Plant and Cell Physiology</i> , <b>2001</b> , 42, 475-81	4.9	53

89	2-Hydroxymelatonin promotes the resistance of rice plant to multiple simultaneous abiotic stresses (combined cold and drought). <i>Journal of Pineal Research</i> , <b>2016</b> , 61, 303-16	10.4	53
88	Molecular cloning of melatonin 2-hydroxylase responsible for 2-hydroxymelatonin production in rice ( <i>Oryza sativa</i> ). <i>Journal of Pineal Research</i> , <b>2015</b> , 58, 343-51	10.4	52
87	Predominance of 2-hydroxymelatonin over melatonin in plants. <i>Journal of Pineal Research</i> , <b>2015</b> , 59, 448-54	10.4	50
86	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> , <b>2017</b> , 63, e12412	10.4	49
85	Toxic tetrapyrrole accumulation in protoporphyrinogen IX oxidase-overexpressing transgenic rice plants. <i>Plant Molecular Biology</i> , <b>2008</b> , 67, 535-46	4.6	48
84	Kinetic analysis of purified recombinant rice N-acetylserotonin methyltransferase and peak melatonin production in etiolated rice shoots. <i>Journal of Pineal Research</i> , <b>2013</b> , 54, 139-44	10.4	46
83	Cadmium-induced melatonin synthesis in rice requires light, hydrogen peroxide, and nitric oxide: Key regulatory roles for tryptophan decarboxylase and caffeic acid O-methyltransferase. <i>Journal of Pineal Research</i> , <b>2017</b> , 63, e12441	10.4	45
82	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> , <b>2015</b> , 66, 709-17	7	44
81	Cloning and characterization of the serotonin N-acetyltransferase-2 gene (SNAT2) in rice ( <i>Oryza sativa</i> ). <i>Journal of Pineal Research</i> , <b>2016</b> , 61, 198-207	10.4	44
80	Melatonin is involved in skotomorphogenesis by regulating brassinosteroid biosynthesis in rice plants. <i>Journal of Pineal Research</i> , <b>2018</b> , 65, e12495	10.4	43
79	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> , <b>2013</b> , 55, 131-7	10.4	43
78	Transient induction of melatonin biosynthesis in rice ( <i>Oryza sativa</i> L.) during the reproductive stage. <i>Journal of Pineal Research</i> , <b>2013</b> , 55, 40-5	10.4	38
77	Production of serotonin by dual expression of tryptophan decarboxylase and tryptamine 5-hydroxylase in <i>Escherichia coli</i> . <i>Applied Microbiology and Biotechnology</i> , <b>2011</b> , 89, 1387-94	5.7	37
76	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> , <b>2009</b> , 230, 1197-206	4.7	37
75	Overexpression of a defensin enhances resistance to a fruit-specific anthracnose fungus in pepper. <i>PLoS ONE</i> , <b>2014</b> , 9, e97936	3.7	36
74	Enzymatic features of serotonin biosynthetic enzymes and serotonin biosynthesis in plants. <i>Plant Signaling and Behavior</i> , <b>2008</b> , 3, 389-90	2.5	36
73	Melatonin metabolism, signaling and possible roles in plants. <i>Plant Journal</i> , <b>2021</b> , 105, 376-391	6.9	36
72	Conversion of 5-hydroxytryptophan into serotonin by tryptophan decarboxylase in plants, <i>Escherichia coli</i> , and yeast. <i>Bioscience, Biotechnology and Biochemistry</i> , <b>2008</b> , 72, 2456-8	2.1	35

71	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> , <b>2014</b> , 86, 271-87	4.6	33
70	Functional analysis of the amine substrate specificity domain of pepper tyramine and serotonin N-hydroxycinnamoyltransferases. <i>Plant Physiology</i> , <b>2006</b> , 140, 704-15	6.6	33
69	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> , <b>2018</b> , 64, e12460	10.4	32
68	Cloning and characterization of a serotonin N-acetyltransferase from a gymnosperm, loblolly pine ( <i>Pinus taeda</i> ). <i>Journal of Pineal Research</i> , <b>2014</b> , 57, 348-55	10.4	32
67	Melatonin induction and its role in high light stress tolerance in <i>Arabidopsis thaliana</i> . <i>Journal of Pineal Research</i> , <b>2018</b> , 65, e12504	10.4	32
66	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> , <b>2016</b> , 61, 470-478	10.4	31
65	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> , <b>2011</b> , 66, 247-57	6.9	31
64	Novel major quantitative trait loci regulating the content of isoflavone in soybean seeds. <i>Genes and Genomics</i> , <b>2011</b> , 33, 685-692	2.1	31
63	Knockout of Serotonin -Acetyltransferase-2 Reduces Melatonin Levels and Delays Flowering. <i>Biomolecules</i> , <b>2019</b> , 9,	5.9	27
62	Enriched production of N-hydroxycinnamic acid amides and biogenic amines in pepper ( <i>Capsicum annuum</i> ) flowers. <i>Scientia Horticulturae</i> , <b>2006</b> , 108, 337-341	4.1	27
61	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> , <b>2015</b> , 58, 461-9	10.4	26
60	Melatonin-deficient rice plants show a common semidwarf phenotype either dependent or independent of brassinosteroid biosynthesis. <i>Journal of Pineal Research</i> , <b>2019</b> , 66, e12537	10.4	26
59	Herbicidal and antioxidant responses of transgenic rice overexpressing <i>Myxococcus xanthus</i> protoporphyrinogen oxidase. <i>Plant Physiology and Biochemistry</i> , <b>2005</b> , 43, 423-30	5.4	25
58	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> , <b>2016</b> , 100, 6683-6691	5.7	23
57	Resistance pattern and antioxidant enzyme profiles of protoporphyrinogen oxidase (PROTOX) inhibitor-resistant transgenic rice. <i>Pesticide Biochemistry and Physiology</i> , <b>2008</b> , 91, 53-65	4.9	23
56	Cadmium Disrupts Subcellular Organelles, Including Chloroplasts, Resulting in Melatonin Induction in Plants. <i>Molecules</i> , <b>2017</b> , 22,	4.8	22
55	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> , <b>2018</b> , 1, 94-108	5.1	22
54	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> , <b>2019</b> , 2, 35-46	5.1	21

53	Flavonoids inhibit both rice and sheep serotonin N-acetyltransferases and reduce melatonin levels in plants. <i>Journal of Pineal Research</i> , <b>2018</b> , 65, e12512	10.4	21
52	Gene flow from herbicide-tolerant GM rice and the heterosis of GM rice-weed F2 progeny. <i>Planta</i> , <b>2011</b> , 233, 807-15	4.7	20
51	Cytoprotective activities of hydroxycinnamic acid amides of serotonin against oxidative stress-induced damage in HepG2 and HaCaT cells. <i>Phytotherapy Research</i> , <b>2010</b> , 81, 1134-41	3.2	20
50	The phyto-melatonin receptor (PMRT1) Arabidopsis Cand2 is not a bona fide G protein-coupled melatonin receptor. <i>Melatonin Research</i> , <b>2020</b> , 3, 177-186	5.1	20
49	Partial characterization of farnesyl and geranylgeranyl diphosphatases induced in rice seedlings by UV-C irradiation. <i>Plant and Cell Physiology</i> , <b>2001</b> , 42, 864-7	4.9	19
48	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> , <b>2008</b> , 81, 43-9	5.7	18
47	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> , <b>2019</b> , 9,	5.9	17
46	Melatonin Deficiency Confers Tolerance to Multiple Abiotic Stresses in Rice via Decreased Brassinosteroid Levels. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	17
45	Enhanced nutraceutical serotonin derivatives of rice seed by hydroxycinnamoyl-CoA:serotonin N-(hydroxycinnamoyl)transferase. <i>Plant Science</i> , <b>2005</b> , 168, 783-788	5.3	17
44	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> , <b>2014</b> , 57, 147-54	10.4	16
43	2-Hydroxymelatonin, a Predominant Hydroxylated Melatonin Metabolite in Plants, Shows Antitumor Activity against Human Colorectal Cancer Cells. <i>Molecules</i> , <b>2017</b> , 22,	4.8	15
42	Pathogen resistance of transgenic rice plants expressing mitogen-activated protein kinase 1, MK1, from <i>Capsicum annuum</i> . <i>Molecules and Cells</i> , <b>2004</b> , 17, 81-5	3.5	15
41	Use of <i>Myxococcus xanthus</i> protoporphyrinogen oxidase as a selectable marker for transformation of rice. <i>Pesticide Biochemistry and Physiology</i> , <b>2007</b> , 88, 31-35	4.9	14
40	Simultaneous Suppression of Two Distinct Serotonin -Acetyltransferase Isogenes by RNA Interference Leads to Severe Decreases in Melatonin and Accelerated Seed Deterioration in Rice. <i>Biomolecules</i> , <b>2020</b> , 10,	5.9	13
39	Production of phenylpropanoid amides in recombinant <i>Escherichia coli</i> . <i>Metabolic Engineering</i> , <b>2009</b> , 11, 64-8	9.7	13
38	Responses of MxPPO overexpressing transgenic tall fescue plants to two diphenyl-ether herbicides, oxyfluorfen and acifluorfen. <i>Acta Physiologiae Plantarum</i> , <b>2008</b> , 30, 745-754	2.6	13
37	Enhanced synthesis of feruloyltyramine and 4-coumaroyltyramine is associated with tyramine availability in transgenic rice expressing pepper tyramine N-hydroxycinnamoyltransferase. <i>Plant Science</i> , <b>2007</b> , 172, 57-63	5.3	13
36	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> , <b>2012</b> , 48, 453-461	6.1	12

35	Tyramine accumulation in rice cells caused a dwarf phenotype via reduced cell division. <i>Planta</i> , <b>2011</b> , 233, 251-60	4.7	12
34	Induced synthesis of caffeoylserotonin in pepper fruits upon infection by the anthracnose fungus, <i>Colletotrichum gloeosporioides</i> . <i>Scientia Horticulturae</i> , <b>2010</b> , 124, 290-293	4.1	12
33	Enhanced octopamine synthesis through the ectopic expression of tyrosine decarboxylase in rice plants. <i>Plant Science</i> , <b>2009</b> , 176, 46-50	5.3	12
32	Production of ketocarotenoids in transgenic carrot plants with an enhanced level of $\beta$ -carotene. <i>Plant Biotechnology Reports</i> , <b>2012</b> , 6, 133-140	2.5	11
31	Ectopic expression of serotonin N-hydroxycinnamoyltransferase and differential production of phenylpropanoid amides in transgenic tomato tissues. <i>Scientia Horticulturae</i> , <b>2009</b> , 120, 504-510	4.1	11
30	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> , <b>2009</b> , 31, 911-5	3	10
29	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> , <b>2006</b> , 86, 186-194	4.9	10
28	Cloning of a sesquiterpene cyclase and its functional expression by domain swapping strategy. <i>Molecules and Cells</i> , <b>2000</b> , 10, 220-5	3.5	10
27	Rice P450 reductases differentially affect P450-mediated metabolism in bacterial expression systems. <i>Bioprocess and Biosystems Engineering</i> , <b>2013</b> , 36, 325-31	3.7	9
26	Developmentally regulated sesquiterpene production confers resistance to <i>Colletotrichum gloeosporioides</i> in ripe pepper fruits. <i>PLoS ONE</i> , <b>2014</b> , 9, e109453	3.7	9
25	Either soluble or plastidic expression of recombinant protoporphyrinogen oxidase modulates tetrapyrrole biosynthesis and photosynthetic efficiency in transgenic rice. <i>Bioscience, Biotechnology and Biochemistry</i> , <b>2003</b> , 67, 1472-8	2.1	8
24	Cyclic 3-hydroxymelatonin exhibits diurnal rhythm and cyclic 3-hydroxymelatonin overproduction increases secondary tillers in rice by upregulating MOC1 expression. <i>Melatonin Research</i> , <b>2019</b> , 2, 120-138 <sup>5.1</sup>	5.1	8
23	Effects of Light Quality and Phytochrome Form on Melatonin Biosynthesis in Rice. <i>Biomolecules</i> , <b>2020</b> , 10,	5.9	7
22	Overexpression of Rice Ferrochelatase I and II Leads to Increased Susceptibility to Oxyfluorfen Herbicide in Transgenic Rice <b>2010</b> , 53, 291-296		7
21	Endosperm-specific expression of serotonin N-hydroxycinnamoyltransferase in rice. <i>Plant Foods for Human Nutrition</i> , <b>2008</b> , 63, 53-7	3.9	7
20	Melatonin Regulates Chloroplast Protein Quality Control via a Mitogen-Activated Protein Kinase Signaling Pathway. <i>Antioxidants</i> , <b>2021</b> , 10,	7.1	7
19	Protoporphyrinogen Oxidase Overexpressing Transgenic Rice is Resistant to Drought Stress. <i>Crop Science</i> , <b>2013</b> , 53, 1076-1085	2.4	6
18	Phytomelatonin as a signaling molecule for protein quality control via chaperone, autophagy, and ubiquitin-proteasome systems in plants.. <i>Journal of Experimental Botany</i> , <b>2022</b> ,	7	5

17	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> , <b>2012</b> , 35, 205-10	3.7	4
16	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> , <b>2009</b> , 31, 1469-75	3	4
15	Expression of recombinant protoporphyrinogen oxidase influences growth and morphological characteristics in transgenic rice. <i>Plant Growth Regulation</i> , <b>2004</b> , 42, 283-288	3.2	4
14	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> , <b>2004</b> , 166, 881-887	5.3	4
13	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> , <b>2021</b> , 4, 501-506	5.1	4
12	Rice N-acetylserotonin deacetylase regulates melatonin levels in transgenic rice. <i>Melatonin Research</i> , <b>2020</b> , 3, 32-42	5.1	4
11	Tryptophan boost caused by senescence occurred independently of cytoplasmic glutamine synthetase. <i>Bioscience, Biotechnology and Biochemistry</i> , <b>2010</b> , 74, 2352-4	2.1	3
10	Methanol elicits the biosynthesis of 4-coumaroylserotonin and feruloylserotonin in rice seedlings. <i>Plant Signaling and Behavior</i> , <b>2011</b> , 6, 881-3	2.5	3
9	2-Hydroxymelatonin, Rather Than Melatonin, Is Responsible for RBOH-Dependent Reactive Oxygen Species Production Leading to Premature Senescence in Plants. <i>Antioxidants</i> , <b>2021</b> , 10,	7.1	3
8	Suppression of Rice Cryptochrome 1b Decreases Both Melatonin and Expression of Brassinosteroid Biosynthetic Genes Resulting in Salt Tolerance. <i>Molecules</i> , <b>2021</b> , 26,	4.8	3
7	Functional Characterization of Serotonin -Acetyltransferase in Archaeon .. <i>Antioxidants</i> , <b>2022</b> , 11,	7.1	3
6	Ectopic expression of MAP kinase inhibits germination and seedling growth in transgenic rice. <i>Plant Growth Regulation</i> , <b>2005</b> , 45, 251-257	3.2	2
5	Fitness cost and competitive ability of transgenic herbicide-tolerant rice expressing a protoporphyrinogen oxidase gene. <i>Journal of Ecology and Environment</i> , <b>2013</b> , 36, 39-47	2	2
4	Exogenous Gibberellin Treatment Enhances Melatonin Synthesis for Melatonin-Enriched Rice Production.. <i>Biomolecules</i> , <b>2022</b> , 12,	5.9	1
3	Arthropod Diversity and Community Structure in Fields of Non-genetically Modified (GM) and Herbicide-tolerant GM Rice. <i>Korean Journal of Applied Entomology</i> , <b>2015</b> , 335-343		1
2	Molecular Regulation of Antioxidant Melatonin Biosynthesis by Brassinosteroid Acting as an Endogenous Elicitor of Melatonin Induction in Rice Seedlings. <i>Antioxidants</i> , <b>2022</b> , 11, 918	7.1	1
1	Phenotype Comparison between Herbicide Tolerant Transgenic Rice and Weedy Rice. <i>Weed &amp; Turfgrass Science</i> , <b>2013</b> , 2, 15-22		