Tomokazu Koshiba

List of Publications by Year
in descending order

98 papers	10,825 citations	50276 46 h-index	39675 94 g-index
98 all docs	98 docs citations	98 times ranked	10244 citing authors

#	Article	IF	Citations
1	Low-fluence blue light-induced phosphorylation of Zmphot1 mediates the first positive phototropism. Journal of Experimental Botany, 2019, 70, 5929-5941.	4.8	9
2	Immunolocalization of IAA Using an Anti-IAA-C-Antibody Raised Against Carboxyl-Linked IAA. Methods in Molecular Biology, 2019, 1924, 165-172.	0.9	2
3	Expression of RSOsPR10 in rice roots is antagonistically regulated by jasmonate/ethylene and salicylic acid via the activator OsERF87 and the repressor OsWRKY76, respectively. Plant Direct, 2018, 2, e00049.	1.9	9
4	Yucasin DF, a potent and persistent inhibitor of auxin biosynthesis in plants. Scientific Reports, 2017, 7, 13992.	3.3	44
5	AtSWEET13 and AtSWEET14 regulate gibberellin-mediated physiological processes. Nature Communications, 2016, 7, 13245.	12.8	229
6	Root cap-dependent gravitropic U-turn of maize root requires light-induced auxin biosynthesis via the YUC pathway in the root apex. Journal of Experimental Botany, 2016, 67, 4581-4591.	4.8	28
7	Effects of anti-auxins on secondary aerenchyma formation in flooded soybean hypocotyls. Plant Production Science, 2016, 19, 154-160.	2.0	8
8	Overexpression of RSOsPR10, a root-specific rice PR10 gene, confers tolerance against drought stress in rice and drought and salt stresses in bentgrass. Plant Cell, Tissue and Organ Culture, 2016, 127, 35-46.	2.3	18
9	Live Single-Cell Plant Hormone Analysis by Video-Mass Spectrometry. Plant and Cell Physiology, 2015, 56, 1287-1296.	3.1	39
10	Identification of Arabidopsis thaliana NRT1/PTR FAMILY (NPF) proteins capable of transporting plant hormones. Journal of Plant Research, 2015, 128, 679-686.	2.4	205
11	Light-dependent control of redox balance and auxin biosynthesis in plants. Plant Signaling and Behavior, 2014, 9, e29522.	2.4	18
12	A 2,4-dichlorophenoxyacetic acid analog screened using a maize coleoptile system potentially inhibits indole-3-acetic acid influx inArabidopsis thaliana. Plant Signaling and Behavior, 2014, 9, e29077.	2.4	5
13	Yucasin is a potent inhibitor of <scp>YUCCA</scp>, a key enzyme in auxin biosynthesis. Plant Journal, 2014, 77, 352-366.	5.7	167
14	The rice <scp>FISH BONE</scp> gene encodes a tryptophan aminotransferase, which affects pleiotropic auxinâ€related processes. Plant Journal, 2014, 78, 927-936.	5.7	100
15	Blue-light regulation of ZmPHOT1 and ZmPHOT2 gene expression and the possible involvement of Zmphot1 in phototropism in maize coleoptiles. Planta, 2014, 240, 251-261.	3.2	9
16	ABA Biosynthetic and Catabolic Pathways. , 2014, , 21-45.		20
17	NAL1 allele from a rice landrace greatly increases yield in modern indica cultivars. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20431-20436.	7.1	249
18	Auxin Biosynthesis and Polar Auxin Transport During Tropisms in Maize Coleoptiles. Signaling and Communication in Plants, 2013, , 221-238.	0.7	0

#	Article	IF	Citations
19	Identification of an abscisic acid transporter by functional screening using the receptor complex as a sensor. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 9653-9658.	7.1	421
20	Identification of IAA Transport Inhibitors Including Compounds Affecting Cellular PIN Trafficking by Two Chemical Screening Approaches Using Maize Coleoptile Systems. Plant and Cell Physiology, 2012, 53, 1671-1682.	3.1	34
21	Identification of superoxide production by Arabidopsis thaliana aldehyde oxidases AAO1 and AAO3. Plant Molecular Biology, 2012, 80, 659-671.	3.9	22
22	Gravistimulation Changes the Accumulation Pattern of the CsPIN1 Auxin Efflux Facilitator in the Endodermis of the Transition Zone in Cucumber Seedlings Â. Plant Physiology, 2012, 158, 239-251.	4.8	10
23	Alkoxy-auxins Are Selective Inhibitors of Auxin Transport Mediated by PIN, ABCB, and AUX1 Transporters. Journal of Biological Chemistry, 2011, 286, 2354-2364.	3.4	52
24	Differential Expression of Two Cytosolic Ascorbate Peroxidases and Two Superoxide Dismutase Genes in Response to Abiotic Stress in Rice. Rice Science, 2011, 18, 157-166.	3.9	21
25	Transport of ABA from the site of biosynthesis to the site of action. Journal of Plant Research, 2011, 124, 501-507.	2.4	120
26	Immunohistochemical observation of indole-3-acetic acid at the IAA synthetic maize coleoptile tips. Plant Signaling and Behavior, 2011, 6, 2013-2022.	2.4	25
27	NPH3- and PGP-like genes are exclusively expressed in the apical tip region essential for blue-light perception and lateral auxin transport in maize coleoptiles. Journal of Experimental Botany, 2011, 62, 3459-3466.	4.8	38
28	Spatially selective hormonal control of RAP2.6L and ANAC071 transcription factors involved in tissue reunion in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16128-16132.	7.1	145
29	RSOsPR10 Expression in Response to Environmental Stresses is Regulated Antagonistically by Jasmonate/Ethylene and Salicylic Acid Signaling Pathways in Rice Roots. Plant and Cell Physiology, 2011, 52, 1686-1696.	3.1	95
30	Indole-3-Acetic Acid Biosynthesis and Gravitropic Response in Maize Coleoptiles. Uchu Seibutsu Kagaku, 2011, 25, 37-43.	0.3	0
31	Auxin biosynthesis site and polar transport in maize coleoptiles. Plant Signaling and Behavior, 2010, 5, 573-575.	2.4	3
32	Differential Downward Stream of Auxin Synthesized at the Tip Has a Key Role in Gravitropic Curvature via TIR1/AFBs-Mediated Auxin Signaling Pathways. Plant and Cell Physiology, 2009, 50, 1874-1885.	3.1	48
33	Activation of abscisic acid biosynthesis in the leaves of Arabidopsis thaliana in response to water deficit. Journal of Plant Research, 2009, 122, 235-243.	2.4	125
34	Contribution of salicylic acid glucosyltransferase, OsSGT1, to chemically induced disease resistance in rice plants. Plant Journal, 2009, 57, 463-472.	5.7	90
35	Identification of a novel E3 ubiquitin ligase that is required for suppression of premature senescence in Arabidopsis. Plant Journal, 2009, 59, 39-51.	5.7	126
36	A rice tryptophan deficient dwarf mutant, tdd1, contains a reduced level of indole acetic acid and develops abnormal flowers and organless embryos. Plant Journal, 2009, 60, 227-241.	5.7	88

#	Article	IF	Citations
37	Biochemical analyses of indole-3-acetaldoxime-dependent auxin biosynthesis in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 5430-5435.	7.1	304
38	Phytochromes and cryptochromes regulate the differential growth of Arabidopsis hypocotyls in both a PGP19â€dependent and a PGP19â€independent manner. Plant Journal, 2008, 53, 516-529.	5.7	74
39	Transient expression of AtNCED3 and AAO3 genes in guard cells causes stomatal closure in Vicia faba. Journal of Plant Research, 2008, 121, 125-131.	2.4	43
40	NARROW LEAF 7 controls leaf shape mediated by auxin in rice. Molecular Genetics and Genomics, 2008, 279, 499-507.	2.1	207
41	Proteome analysis of proteins responsive to ambient and elevated ozone in rice seedlings. Agriculture, Ecosystems and Environment, 2008, 125, 255-265.	5.3	41
42	Drought Induction of Arabidopsis 9-cis-Epoxycarotenoid Dioxygenase Occurs in Vascular Parenchyma Cells Â Â. Plant Physiology, 2008, 147, 1984-1993.	4.8	310
43	Vascular system is a node of systemic stress responses. Plant Signaling and Behavior, 2008, 3, 1138-1140.	2.4	19
44	Phytochrome- and Gibberellin-Mediated Regulation of Abscisic Acid Metabolism during Germination of Photoblastic Lettuce Seeds. Plant Physiology, 2008, 146, 1386-1396.	4.8	79
45	Genetic Characterization of Mutants Resistant to the Antiauxinp-Chlorophenoxyisobutyric Acid Reveals ThatAAR3, a Gene Encoding a DCN1-Like Protein, Regulates Responses to the Synthetic Auxin 2,4-Dichlorophenoxyacetic Acid in Arabidopsis Roots. Plant Physiology, 2007, 145, 773-785.	4.8	46
46	Ectopic Expression of ABSCISIC ACID 2/GLUCOSE INSENSITIVE 1 in Arabidopsis Promotes Seed Dormancy and Stress Tolerance. Plant Physiology, 2007, 143, 745-758.	4.8	134
47	A Plant Growth Retardant, Uniconazole, Is a Potent Inhibitor of ABA Catabolism inArabidopsis. Bioscience, Biotechnology and Biochemistry, 2006, 70, 1731-1739.	1.3	109
48	CYP707A1 and CYP707A2, Which Encode Abscisic Acid 8â€²-Hydroxylases, Are Indispensable for Proper Control of Seed Dormancy and Germination in Arabidopsis. Plant Physiology, 2006, 141, 97-107.	4.8	473
49	CYP707A3, a major ABA 8â€²-hydroxylase involved in dehydration and rehydration response inArabidopsis thaliana. Plant Journal, 2006, 46, 171-182.	5.7	294
50	Regulation of hormone metabolism in Arabidopsis seeds: phytochrome regulation of abscisic acid metabolism and abscisic acid regulation of gibberellin metabolism. Plant Journal, 2006, 48, 354-366.	5.7	403
51	Isolation of gametes and central cells from Oryza sativa L.. Sexual Plant Reproduction, 2006, 19, 37-45.	2.2	56
52	Abscisic acid and stress treatment are essential for the acquisition of embryogenic competence by carrot somatic cells. Planta, 2006, 223, 637-645.	3.2	78
53	Red light causes a reduction in IAA levels at the apical tip by inhibiting de novo biosynthesis from tryptophan in maize coleoptiles. Planta, 2006, 224, 1427-1435.	3.2	29
54	Effect of ABA upon anthocyanin synthesis in regenerated torenia shoots. Journal of Plant Research, 2006, 119, 137-144.	2.4	45

#	Article	IF	Citations
55	Aldehyde Oxidase (AO) in the Root Nodules of Lupinus albus and Medicago truncatula: Identification of AO in Meristematic and Infection Zones. Molecular Plant-Microbe Interactions, 2005, 18, 405-413.	2.6	34
56	Genome-wide profiling of stored mRNA in Arabidopsis thaliana seed germination: epigenetic and genetic regulation of transcription in seed. Plant Journal, 2005, 41, 697-709.	5.7	528
57	Cold acclimation in bryophytes: low-temperature-induced freezing tolerance in Physcomitrella patens is associated with increases in expression levels of stress-related genes but not with increase in level of endogenous abscisic acid. Planta, 2005, 220, 414-423.	3.2	100
58	Possible involvement of abscisic acid in the induction of secondary somatic embryogenesis on seed-coat-derived carrot somatic embryos. Planta, 2005, 221, 417-423.	3.2	22
59	Interaction of Auxin and ERECTA in Elaborating Arabidopsis Inflorescence Architecture Revealed by the Activation Tagging of a New Member of the YUCCA Family Putative Flavin Monooxygenases. Plant Physiology, 2005, 139, 192-203.	4.8	112
60	Vigorous synthesis of indole-3-acetic acid in the apical very tip leads to a constant basipetal flow of the hormone in maize coleoptiles. Plant Science, 2005, 168, 467-473.	3.6	36
61	A Novel Rice PR10 Protein, RSOsPR10, Specifically Induced in Roots by Biotic and Abiotic Stresses, Possibly via the Jasmonic Acid Signaling Pathway. Plant and Cell Physiology, 2004, 45, 550-559.	3.1	172
62	Identification of Major Proteins in Maize Egg Cells. Plant and Cell Physiology, 2004, 45, 1406-1412.	3.1	65
63	Tissue-Specific Localization of an Abscisic Acid Biosynthetic Enzyme, AAO3, in Arabidopsis. Plant Physiology, 2004, 134, 1697-1707.	4.8	217
64	Activity and protein level of AO isoforms in pea plants (Pisum sativum L.) during vegetative development and in response to stress conditions. Journal of Experimental Botany, 2004, 55, 1361-1369.	4.8	25
65	Comparative Studies on the Arabidopsis Aldehyde Oxidase (AAO) Gene Family Revealed a Major Role of AAO3 in ABA Biosynthesis in Seeds. Plant and Cell Physiology, 2004, 45, 1694-1703.	3.1	175
66	Disruption and overexpression of auxin response factor 8 gene of Arabidopsis affect hypocotyl elongation and root growth habit, indicating its possible involvement in auxin homeostasis in light condition. Plant Journal, 2004, 40, 333-343.	5.7	235
67	The Arabidopsis cytochrome P450 CYP707A encodes ABA 8â€²-hydroxylases: key enzymes in ABA catabolism. EMBO Journal, 2004, 23, 1647-1656.	7.8	872
68	Effects of ethylene and abscisic acid upon heterophylly in Ludwigia arcuata (Onagraceae). Planta, 2003, 217, 880-887.	3.2	63
69	Brassinolide Induces IAA5, IAA19, and DR5, a Synthetic Auxin Response Element in Arabidopsis, Implying a Cross Talk Point of Brassinosteroid and Auxin Signaling. Plant Physiology, 2003, 133, 1843-1853.	4.8	226
70	A Unique Short-Chain Dehydrogenase/Reductase in Arabidopsis Glucose Signaling and Abscisic Acid Biosynthesis and Functions. Plant Cell, 2002, 14, 2723-2743.	6.6	764
71	Complex regulation of ABA biosynthesis in plants. Trends in Plant Science, 2002, 7, 41-48.	8.8	703
72	The HAT2 gene, a member of the HD-Zip gene family, isolated as an auxin inducible gene by DNA microarray screening, affects auxin response in Arabidopsis. Plant Journal, 2002, 32, 1011-1022.	5.7	165

#	Article	IF	Citations
73	Abscisic aldehyde oxidase in leaves of Arabidopsis thaliana. Plant Journal, 2000, 23, 481-488.	5.7	174
74	Molecular cloning and expression patterns of three putative functional aldehyde oxidase genes and isolation of two aldehyde oxidase pseudogenes in tomato. Biochimica Et Biophysica Acta Gene Regulatory Mechanisms, 2000, 1493, 337-341.	2.4	27
75	Functional Expression of Two Arabidopsis Aldehyde Oxidases in the Yeast Pichia pastoris. Journal of Biochemistry, 2000, 127, 659-664.	1.7	37
76	Aldehyde oxidase in roots, leaves and seeds of barley (Hordeum vulgare L.). Journal of Experimental Botany, 1999, 50, 63-69.	4.8	34
77	Effects of Î³-irradiation on elongation and indole-3-acetic acid level of maize (Zea mays) coleoptiles. Environmental and Experimental Botany, 1999, 41, 131-143.	4.2	17
78	Aldehyde oxidase in roots, leaves and seeds of barley (Hordeum vulgare L.). Journal of Experimental Botany, 1999, 50, 63-69.	4.8	15
79	Effect of Î³-radiation on the plasma and vacuolar membranes of cultured spinach cells. Phytochemistry, 1998, 48, 1281-1286.	2.9	4
80	Involvement of peroxidase in differential sensitivity to Î³-radiation in seedlings of two Nicotiana species. Plant Science, 1998, 132, 109-119.	3.6	50
81	Î³-Irradiation damage to the tonoplast in cultured spinach cells. Environmental and Experimental Botany, 1998, 39, 97-104.	4.2	4
82	Higher Activity of an Aldehyde Oxidase in the Auxin-Overproducing superroot1 Mutant ofArabidopsis thaliana1. Plant Physiology, 1998, 116, 687-693.	4.8	167
83	Aldehyde Oxidase in Wild Type and abal Mutant Leaves of Nicotiana plumbaginifolia. Plant and Cell Physiology, 1998, 39, 1281-1286.	3.1	28
84	Cloning and Molecular Characterization of Plant Aldehyde Oxidase. Journal of Biological Chemistry, 1997, 272, 15280-15285.	3.4	76
85	Transcriptional Regulation ofPS-IAA4/5andPS-IAA6Early Gene Expression by Indoleacetic Acid and Protein Synthesis Inhibitors in Pea(Pisum sativum). Journal of Molecular Biology, 1995, 253, 396-413.	4.2	76
86	Expression of cDNA for a bark lectin ofRobiniain transgenic tobacco plants. FEBS Letters, 1995, 377, 54-58.	2.8	6
87	Î³-Irradiation damage to leaf vacuole membranes of Chelidonium majus. Environmental and Experimental Botany, 1995, 35, 71-81.	4.2	12
88	Flavin-photosensitized production of indole-3-acetaldehyde from tryptophan. Tetrahedron Letters, 1993, 34, 7603-7604.	1.4	9
89	L- and D-tryptophan aminotransferases from maize coleoptiles. Journal of Plant Research, 1993, 106, 25-29.	2.4	21
90	Cytosolic Ascorbate Peroxidase in Seedlings and Leaves of Maize (Zea mays). Plant and Cell Physiology, 1993, 34, 713-721.	3.1	99

#	Article	IF	Citations
91	Characterization and Role of RNAs Synthesized during Early Spore Germination of the Fern Cyathea. Journal of Plant Physiology, 1986, 123, 487-495.	3.5	4
92	Compositional changes in germinating spores ofAdiantum capillus-veneris L.. Botanical Magazine, 1984, 97, 313-322.	0.6	15
93	Hydrolytic enzyme activities in germinating spores ofAdiantum capillus-veneris L.. Botanical Magazine, 1984, 97, 323-331.	0.6	8
94	Micro-spot Assay and Detection on Polyacrylamide Gel of Mung Bean Endopeptidase Activity by Substrateâ€“Polyacrylamide Gel Plate Method. Agricultural and Biological Chemistry, 1984, 48, 2387-2388.	0.3	0
95	Micro-spot assay and detection on polyacrylamide gel of mung bean endopeptidase activity by substrate-polyacrylamide gel plate method.. Agricultural and Biological Chemistry, 1984, 48, 2387-2388.	0.3	3
96	Multiple Forms of Acid Phosphatase in Cotyledons ofVigna mungoSeedlings. Journal of Experimental Botany, 1982, 33, 1332-1339.	4.8	18
97	Histochemical studies on mobilization of storage components in cotyledons of germinatingPhaseolus mungo seeds. Botanical Magazine, 1979, 92, 325-332.	0.6	7
98	Purification of two forms of the associated 3-dehydroquinate hydro-lyase and shikimate:NADP+ oxidoreductase in Phaseolus mungo seedlings. Biochimica Et Biophysica Acta - Biomembranes, 1978, 522, 10-18.	2.6	34