Hisashi Koiwa

List of Publications by Year
in descending order

99 papers	6,411 citations	71102 41 h-index	66911 78 g-index
102 all docs	102 docs citations	102 times ranked	6757 citing authors

#	Article	IF	Citations
1	AtHKT1 is a salt tolerance determinant that controls Na+ entry into plant roots. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 14150-14155.	7.1	441
2	Regulation of protease inhibitors and plant defense. Trends in Plant Science, 1997, 2, 379-384.	8.8	428
3	Transcriptional Regulation of Sorghum Defense Determinants against a Phloem-Feeding Aphid. Plant Physiology, 2004, 134, 420-431.	4.8	378
4	Specific interactions between Dicer-like proteins and HYL1/DRB- family dsRNA-binding proteins in Arabidopsis thaliana. Plant Molecular Biology, 2005, 57, 173-188.	3.9	259
5	Salt tolerance of <i>Arabidopsis thaliana</i> requires maturation of <i>N</i> -glycosylated proteins in the Golgi apparatus. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 5933-5938.	7.1	226
6	OSM1/SYP61: A Syntaxin Protein in Arabidopsis Controls Abscisic Acidâ€“Mediated and Non-Abscisic Acidâ€“Mediated Responses to Abiotic Stress. Plant Cell, 2002, 14, 3009-3028.	6.6	204
7	Stress signaling through Ca2+/calmodulin-dependent protein phosphatase calcineurin mediates salt adaptation in plants. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 9681-9686.	7.1	202
8	The STT3a Subunit Isoform of the Arabidopsis Oligosaccharyltransferase Controls Adaptive Responses to Salt/Osmotic Stress. Plant Cell, 2003, 15, 2273-2284.	6.6	202
9	Cowpea bruchid Callosobruchus maculatus uses a three-component strategy to overcome a plant defensive cysteine protease inhibitor. Insect Molecular Biology, 2003, 12, 135-145.	2.0	177
10	A genomics approach towards salt stress tolerance. Plant Physiology and Biochemistry, 2001, 39, 295-311.	5.8	176
11	Pattern Recognition Receptors Require N-Glycosylation to Mediate Plant Immunity. Journal of Biological Chemistry, 2010, 285, 4629-4636.	3.4	164
12	Genes That Are Uniquely Stress Regulated in Salt Overly Sensitive (sos) Mutants. Plant Physiology, 2001, 126, 363-375.	4.8	160
13	AtBAG6, a novel calmodulin-binding protein, induces programmed cell death in yeast and plants. Cell Death and Differentiation, 2006, 13, 84-95.	11.2	157
14	Uncoupling the Effects of Abscisic Acid on Plant Growth and Water Relations. Analysis of sto1/nced3, an Abscisic Acid-Deficient but Salt Stress-Tolerant Mutant in Arabidopsis. Plant Physiology, 2004, 136, 3134-3147.	4.8	156
15	Arabidopsis Vegetative Storage Protein Is an Anti-Insect Acid Phosphatase. Plant Physiology, 2005, 139, 1545-1556.	4.8	151
16	C-terminal domain phosphatase-like family members (AtCPLs) differentially regulate Arabidopsis thaliana abiotic stress signaling, growth, and development. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 10893-10898.	7.1	146
17	Repression of stress-responsive genes by FIERY2, a novel transcriptional regulator in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 10899-10904.	7.1	137
18	Crystal structure of tobacco PR-5d protein at 1.8 Ã… resolution reveals a conserved acidic cleft structure in antifungal thaumatin-like proteins 1 1Edited by R. Huber. Journal of Molecular Biology, 1999, 286, 1137-1145.	4.2	126

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19	Carbohydrate binding and resistance to proteolysis control insecticidal activity of Griffonia simplicifolia lectin II. Proceedings of the National Academy of Sciences of the United States of America, 1998, 95, 15123-15128.	7.1	121
20	Function of N-glycosylation in plants. Plant Science, 2018, 274, 70-79.	3.6	115
21	Arabidopsis C-terminal domain phosphatase-like 1 and 2 are essential Ser-5-specific C-terminal domain phosphatases. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 14539-14544.	7.1	108
22	A plant defensive cystatin (soyacystatin) targets cathepsin Lâ€like digestive cysteine proteinases (DvCALs) in the larval midgut of western corn rootworm (<i>Diabrotica virgifera virgifera</i>). FEBS Letters, 2000, 471, 67-70.	2.8	97
23	Specific control of Arabidopsis BAK1/SERK4-regulated cell death by protein glycosylation. Nature Plants, 2016, 2, 15218.	9.3	95
24	Phage display selection can differentiate insecticidal activity of soybean cystatins. Plant Journal, 1998, 14, 371-379.	5.7	84
25	Comparative Analyses of Arabidopsis <i>complex glycan1</i> Mutants and Genetic Interaction with <i>staurosporin</i> Â<i>and temperature sensitive3a</i> Â Â. Plant Physiology, 2008, 148, 1354-1367.	4.8	72
26	Modulation of RNA Polymerase II Phosphorylation Downstream of Pathogen Perception Orchestrates Plant Immunity. Cell Host and Microbe, 2014, 16, 748-758.	11.0	70
27	KETCH1 imports HYL1 to nucleus for miRNA biogenesis in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4011-4016.	7.1	70
28	Transcriptional regulation in cowpea bruchid guts during adaptation to a plant defence protease inhibitor. Insect Molecular Biology, 2004, 13, 283-291.	2.0	67
29	Purification and Characterization of Tobacco Pathogenesis-Related Protein PR-5d, an Antifungal Thaumatin-like Protein. Plant and Cell Physiology, 1997, 38, 783-791.	3.1	65
30	Identification of plant stress-responsive determinants in arabidopsis by large-scale forward genetic screens. Journal of Experimental Botany, 2006, 57, 1119-1128.	4.8	65
31	Genetic diversity, linkage disequilibrium, and population structure analysis of the tea plant (Camellia) Tj ETQq1 1 0.784314 rgBT /Overlo genotyping-by-sequencing. BMC Plant Biology, 2019, 19, 328.	3.6	65
32	Tomato expressing Arabidopsis glutaredoxin gene AtGRXS17 confers tolerance to chilling stress via modulating cold responsive components. Horticulture Research, 2015, 2, 15051.	6.3	62
33	Multiple N-Glycans Cooperate in the Subcellular Targeting and Functioning of Arabidopsis KORRIGAN1. Plant Cell, 2014, 26, 3792-3808.	6.6	53
34	Functional roles of specific bruchid protease isoforms in adaptation to a soybean protease inhibitor. Insect Molecular Biology, 2004, 13, 649-657.	2.0	51
35	Functional expression of an insect cathepsin Bâ€like counterâ€defence protein. Insect Molecular Biology, 2008, 17, 235-245.	2.0	51
36	Reduced Immunogenicity of Arabidopsis hgl1 Mutant N-Glycans Caused by Altered Accessibility of Xylose and core Fucose Epitopes. Journal of Biological Chemistry, 2011, 286, 22955-22964.	3.4	51

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37	Two Arabidopsis thaliana Golgi Î±-mannosidase I enzymes are responsible for plant N-glycan maturation. Glycobiology, 2010, 20, 235-247.	2.5	50
38	The Arabidopsis thaliana carboxyl-terminal domain phosphatase-like 2 regulates plant growth, stress and auxin responses. Plant Molecular Biology, 2008, 67, 683-697.	3.9	48
39	RISC-interacting clearing 3â€™- 5â€™ exoribonucleases (RICEs) degrade uridylated cleavage fragments to maintain functional RISC in Arabidopsis thaliana. ELife, 2017, 6, .	6.0	48
40	Characterization of Accumulation of Tobacco PR-5 Proteins by IEF-Immunoblot Analysis. Plant and Cell Physiology, 1994, 35, 821-827.	3.1	46
41	Protease inhibitors from several classes work synergistically against Callosobruchus maculatus. Journal of Insect Physiology, 2007, 53, 734-740.	2.0	45
42	Different Strategies for Carboxyl-terminal Domain (CTD) Recognition by Serine 5-specific CTD Phosphatases. Journal of Biological Chemistry, 2005, 280, 37681-37688.	3.4	42
43	Arabidopsis Carboxyl-Terminal Domain Phosphatase-Like Isoforms Share Common Catalytic and Interaction Domains But Have Distinct in Planta Functions. Plant Physiology, 2006, 142, 586-594.	4.8	41
44	Arabidopsis thaliana PRP40s are RNA polymerase II C-terminal domain-associating proteins. Archives of Biochemistry and Biophysics, 2009, 484, 30-38.	3.0	39
45	Role of complex<i>N</i>-glycans in plant stress tolerance. Plant Signaling and Behavior, 2008, 3, 871-873.	2.4	37
46	Purification and characterization of <i>Arabidopsis thaliana</i> oligosaccharyltransferase complexes from the native host: a protein superâ€expression system for structural studies. Plant Journal, 2018, 94, 131-145.	5.7	37
47	Loss of Function of Arabidopsis C-Terminal Domain Phosphatase-Like1 Activates Iron Deficiency Responses at the Transcriptional Level Â Â. Plant Physiology, 2012, 161, 330-345.	4.8	36
48	Ethylene negatively regulates local expression of plant defense lectin genes. Physiologia Plantarum, 1998, 104, 365-372.	5.2	32
49	Degradation of SERRATE via ubiquitin-independent 20S proteasome to survey RNA metabolism. Nature Plants, 2020, 6, 970-982.	9.3	32
50	Fusion of a soybean cysteine protease inhibitor and a legume lectin enhances anti-insect activity synergistically. Agricultural and Forest Entomology, 2003, 5, 317-323.	1.3	31
51	The Arabidopsis Kinase-Associated Protein Phosphatase Regulates Adaptation to Na⁺ Stress. Plant Physiology, 2008, 146, 612-622.	4.8	30
52	Title is missing!. Molecular Breeding, 2001, 8, 109-118.	2.1	28
53	Synthesis and Secretion of Tobacco Neutral PR-5 Protein by Transgenic Tobacco and Yeast. Biochemical and Biophysical Research Communications, 1995, 211, 909-913.	2.1	27
54	Inorganic Cations Mediate Plant PR5 Protein Antifungal Activity through Fungal Mnn1- and Mnn4-Regulated Cell Surface Glycans. Molecular Plant-Microbe Interactions, 2004, 17, 780-788.	2.6	26

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55	Effect of asymptomatic infection with southern tomato virus on tomato plants. Archives of Virology, 2020, 165, 11-20.	2.1	25
56	Phage display selection of hairpin loop soyacystatin variants that mediate high affinity inhibition of a cysteine proteinase. Plant Journal, 2001, 27, 383-391.	5.7	23
57	Regulation of Abiotic Stress Signalling by Arabidopsis C-Terminal Domain Phosphatase-Like 1 Requires Interaction with a K-Homology Domain-Containing Protein. PLoS ONE, 2013, 8, e80509.	2.5	23
58	AtCPL5, a novel Serâ€2â€specific RNA polymerase II Câ€terminal domain phosphatase, positively regulates ABA and drought responses in Arabidopsis. New Phytologist, 2011, 190, 57-74.	7.3	22
59	Disturbance of floral colour pattern by activation of an endogenous pararetrovirus, petunia vein clearing virus, in aged petunia plants. Plant Journal, 2020, 103, 497-511.	5.7	22
60	The C-terminal region (640â€“967) of Arabidopsis CPL1 interacts with the abiotic stress- and ABA-responsive transcription factors. Biochemical and Biophysical Research Communications, 2008, 372, 907-912.	2.1	21
61	Arabidopsis CPL4 is an essential Câ€terminal domain phosphatase that suppresses xenobiotic stress responses. Plant Journal, 2014, 80, 27-39.	5.7	21
62	Multiple Quality Control Mechanisms in the ER and TGN Determine Subcellular Dynamics and Salt-Stress Tolerance Function of KORRIGAN1. Plant Cell, 2020, 32, 470-485.	6.6	21
63	Soyacystatin N Inhibits Proteolysis of Wheat Î±-Amylase Inhibitor and Potentiates Toxicity Against Cowpea Weevil. Journal of Economic Entomology, 2004, 97, 2095-2100.	1.8	19
64	Cowpea bruchid Callosobruchus maculatus counteracts dietary protease inhibitors by modulating propeptides of major digestive enzymes. Insect Molecular Biology, 2007, 16, 295-304.	2.0	19
65	Arabidopsis C-Terminal Domain Phosphatase-Like 1 Functions in miRNA Accumulation and DNA Methylation. PLoS ONE, 2013, 8, e74739.	2.5	19
66	Transition of aromatic volatile and transcriptome profiles during melon fruit ripening. Plant Science, 2021, 304, 110809.	3.6	18
67	Antagonistic Regulation, Yet Synergistic Defense: Effect of Bergapten and Protease Inhibitor on Development of Cowpea Bruchid Callosobruchus maculatus. PLoS ONE, 2012, 7, e41877.	2.5	18
68	Post-Translational Regulation of the Dicing Activities of Arabidopsis DICER-LIKE 3 and 4 by Inorganic Phosphate and the Redox State. Plant and Cell Physiology, 2017, 58, pcw226.	3.1	15
69	Development of core-collections for Guizhou tea genetic resources and GWAS of leaf size using SNP developed by genotyping-by-sequencing. PeerJ, 2020, 8, e8572.	2.0	14
70	Calcium modulates protease resistance and carbohydrate binding of a plant defense legume lectin, Griffonia simplicifolia lectin II (GSII). Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2002, 132, 327-334.	1.6	13
71	<i>Arabidopsis thaliana</i>KORRIGAN1 protein: N-glycan modification, localization, and function in cellulose biosynthesis and osmotic stress responses. Plant Signaling and Behavior, 2015, 10, e1024397.	2.4	13
72	Salt Stress and CTD PHOSPHATASE-LIKE4 Mediate the Switch between Production of Small Nuclear RNAs and mRNAs. Plant Cell, 2017, 29, 3214-3233.	6.6	13

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73	Isoform-specific subcellular localization of Zea mays lipoxygenases and oxo-phytodienoate reductase 2. Plant Gene, 2018, 13, 36-41.	2.3	12
74	Soyacystatin N Inhibits Proteolysis of Wheat Î±-Amylase Inhibitor and Potentiates Toxicity Against Cowpea Weevil. Journal of Economic Entomology, 2004, 97, 2095-2100.	1.8	11
75	The epigenetic factor FVE orchestrates cytoplasmic SGS3-DRB4-DCL4 activities to promote transgene silencing in <i>Arabidopsis</i>. Science Advances, 2021, 7, .	10.3	11
76	Isolation and characterization of shs1, a sugar-hypersensitive and ABA-insensitive mutant with multiple stress responses. Plant Molecular Biology, 2007, 65, 295-309.	3.9	10
77	Arabidopsis SCP1-like small phosphatases differentially dephosphorylate RNA polymerase II C-terminal domain. Biochemical and Biophysical Research Communications, 2010, 397, 355-360.	2.1	10
78	Frequent asymptomatic infection with tobacco ringspot virus on melon fruit. Virus Research, 2021, 293, 198266.	2.2	9
79	Phosphorylation of RNA polymerase II C-terminal domain and plant osmotic-stress responses. , 2006, , 47-57.		8
80	One-step casting of Laemmli discontinued sodium dodecyl sulfateâ€"polyacrylamide gel electrophoresis gel. Analytical Biochemistry, 2012, 421, 347-349.	2.4	8
81	A Three-Component Gene Expression System and Its Application for Inducible Flavonoid Overproduction in Transgenic Arabidopsis thaliana. PLoS ONE, 2011, 6, e17603.	2.5	8
82	Stability of AtVSP in the insect digestive canal determines its defensive capability. Journal of Insect Physiology, 2011, 57, 391-399.	2.0	7
83	Improved recombinant protein production in <i>Arabidopsis thaliana</i>. Plant Signaling and Behavior, 2018, 13, e1486149.	2.4	7
84	Silencing Arabidopsis <scp>CARBOXYL</scp>â€<scp>TERMINAL DOMAIN PHOSPHATASE</scp>â€<scp>LIKE</scp> 4 induces cytokininâ€oversensitive <i>de novo</i> shoot organogenesis. Plant Journal, 2018, 94, 799-812.	5.7	6
85	An In-Gel Assay of a Recombinant Western Corn Rootworm (Diabrotica virgifera virgifera) Cysteine Proteinase Expressed in Yeast. Analytical Biochemistry, 2000, 282, 153-155.	2.4	5
86	Cytokinin-overinduced transcription factors and thalianol cluster genes in CARBOXYL-TERMINAL DOMAIN PHOSPHATASE-LIKE 4-silenced Arabidopsis roots during de novo shoot organogenesis. Plant Signaling and Behavior, 2018, 13, e1513299.	2.4	5
87	High throughput selection of antibiotic-resistant transgenic Arabidopsis plants. Analytical Biochemistry, 2017, 525, 44-45.	2.4	4
88	Characterization of rice polyphenol oxidase promoter in transgenic Arabidopsis thaliana. Turkish Journal of Botany, 2017, 41, 223-233.	1.2	4
89	Functional Similarities of Recombinant OLP and Cytokinin-Binding Protein 2. Bioscience, Biotechnology and Biochemistry, 2001, 65, 2806-2810.	1.3	3
90	Function of<i>Arabidopsis</i>CPL1 in cadmium responses. Plant Signaling and Behavior, 2013, 8, e24120.	2.4	3

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91	Biochemical characterization of the dicing activity of Dicer-like 2 in the model filamentous fungus Neurospora crassa. Fungal Genetics and Biology, 2021, 146, 103488.	2.1	3
92	Comparison of CD20 Binding Affinities of Rituximab Produced in Nicotiana benthamiana Leaves and Arabidopsis thaliana Callus. Molecular Biotechnology, 2021, 63, 1016-1029.	2.4	3
93	Glyphosate Resistance as a Versatile Selection Marker for Arabidopsis Transformation. Plant Molecular Biology Reporter, 2009, 27, 132-138.	1.8	2
94	The coding sequence of firefly luciferase reporter gene affects specific hyperexpression in <i>Arabidopsis thaliana cpl1</i> mutant. Plant Signaling and Behavior, 2017, 12, e1346767.	2.4	2
95	Pathways and Genetic Determinants for Cell Wallâ€“based Osmotic Stress Tolerance in theArabidopsis thaliana Root System. , 0, , 35-53.		1
96	Lack of endoplasmic reticulum quality control (ERQC) promotes tonoplast (TP) targeting of KORRIGAN 1 (KOR1). Plant Signaling and Behavior, 2020, 15, 1744348.	2.4	0
97	Nuclear body formation by Arabidopsis CPL1-RCF3 complex requires single-stranded RNA-binding domains. Plant Gene, 2020, 22, 100224.	2.3	0
98	DESIGNING A MOLECULAR SWITCH TO OPTIMIZE PHENYLPROPANOID NEUTRACEUTICALS IN VEGETABLES. Acta Horticulturae, 2009, , 615-618.	0.2	0
99	Functional diversity of Medicago truncatula RNA polymerase II CTD phosphatase isoforms produced in the Arabidopsis thaliana superexpression platform. Plant Science, 2022, , 111309.	3.6	0