Kazuhiko Nishitani

List of Publications by Year
in descending order

89	6,252	81839 39	71651 76
papers	citations	h-index	g-index

93	93	93	6381
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Insights into Land Plant Evolution Garnered from the Marchantia polymorpha Genome. Cell, 2017, 171, 287-304.e15.	13.5	973
2	The XTH Family of Enzymes Involved in Xyloglucan Endotransglucosylation and Endohydrolysis: Current Perspectives and a New Unifying Nomenclature. Plant and Cell Physiology, 2002, 43, 1421-1435.	1.5	679
3	A Comprehensive Expression Analysis of all Members of a Gene Family Encoding Cell-Wall Enzymes Allowed us to Predict cis-Regulatory Regions Involved in Cell-Wall Construction in Specific Organs of Arabidopsis. Plant and Cell Physiology, 2001, 42, 1025-1033.	1.5	269
4	TheANGUSTIFOLIAgene ofArabidopsis, a plantCtBPgene, regulates leaf-cell expansion, the arrangement of cortical microtubules in leaf cells and expression of a gene involved in cell-wall formation. EMBO Journal, 2002, 21, 1267-1279.	3.5	215
5	A Surprising Diversity and Abundance of Xyloglucan Endotransglucosylase/Hydrolases in Rice. Classification and Expression Analysis. Plant Physiology, 2004, 134, 1088-1099.	2.3	197
6	Auxin-induced changes in the cell wall structure: Changes in the sugar compositions, intrinsic viscosity and molecular weight distributions of matrix polysaccharides of the epicotyl cell wall of Vigna angularis. Physiologia Plantarum, 1981, 52, 482-494.	2.6	188
7	Ethylene-gibberellin signaling underlies adaptation of rice to periodic flooding. Science, 2018, 361, 181-186.	6.0	188
8	The Role of Endoxyloglucan Transferase in the Organization of Plant Cell Walls. International Review of Cytology, 1997, 173, 157-206.	6.2	166
9	Genomic Basis for Cell-Wall Diversity in Plants. A Comparative Approach to Gene Families in Rice and Arabidopsis. Plant and Cell Physiology, 2004, 45, 1111-1121.	1.5	161
10	Light Quality-Mediated Petiole Elongation in Arabidopsis during Shade Avoidance Involves Cell Wall Modification by Xyloglucan Endotransglucosylase/Hydrolases Â Â Â. Plant Physiology, 2010, 154, 978-990.	2.3	158
11	KaPPA-View. A Web-Based Analysis Tool for Integration of Transcript and Metabolite Data on Plant Metabolic Pathway Maps. Plant Physiology, 2005, 138, 1289-1300.	2.3	155
12	Demethylesterification of the Primary Wall by PECTIN METHYLESTERASE35 Provides Mechanical Support to the Arabidopsis Stem. Plant Cell, 2012, 24, 2624-2634.	3.1	155
13	A Dof Transcription Factor, SCAP1, Is Essential for the Development of Functional Stomata in Arabidopsis. Current Biology, 2013, 23, 479-484.	1.8	125
14	A Proteomic Approach to Apoplastic Proteins Involved in Cell Wall Regeneration in Protoplasts of Arabidopsis Suspension-cultured Cells. Plant and Cell Physiology, 2005, 46, 843-857.	1.5	119
15	Differential Expression of AtXTH17, AtXTH18, AtXTH19 and AtXTH20 Genes in Arabidopsis Roots. Physiological Roles in Specification in Cell Wall Construction. Plant and Cell Physiology, 2005, 46, 192-200.	1.5	114
16	Pectin RG-I rhamnosyltransferases represent a novel plant-specific glycosyltransferase family. Nature Plants, 2018, 4, 669-676.	4.7	111
17	An Isoflavone Conjugate-hydrolyzing Î²-Glucosidase from the Roots of Soybean (Glycine max) Seedlings. Journal of Biological Chemistry, 2006, 281, 30251-30259.	1.6	110
18	A principal role for AtXTH18 in Arabidopsis thaliana root growth: a functional analysis using RNAi plants. Journal of Plant Research, 2006, 119, 153-162.	1.2	92

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19	Spatiotemporal Secretion of PEROXIDASE36 Is Required for Seed Coat Mucilage Extrusion in Arabidopsis Â. Plant Cell, 2013, 25, 1355-1367.	3.1	85
20	Active gene expression of a xyloglucan endotransglucosylase/hydrolase gene, XTH9, in inflorescence apices is related to cell elongation in Arabidopsis thaliana. Plant Molecular Biology, 2003, 52, 473-482.	2.0	84
21	AtXTH27 plays an essential role in cell wall modification during the development of tracheary elements. Plant Journal, 2005, 42, 525-534.	2.8	80
22	Growth and cell wall changes in azuki bean epicotyls II. Changes in wall polysaccharides during auxininduced growth of excised segments. Plant and Cell Physiology, 1979, 20, 463-472.	1.5	78
23	Cloning, characterization, and expression of xyloglucan endotransglucosylase/hydrolase and expansin genes associated with petal growth and development during carnation flower opening. Journal of Experimental Botany, 2011, 62, 815-823.	2.4	76
24	Chromatin-mediated feed-forward auxin biosynthesis in floral meristem determinacy. Nature Communications, 2018, 9, 5290.	5.8	73
25	Auxin-induced changes in the molecular weight of hemicellulosic polysaccharides of the Avena coleoptile cell wall. Plant and Cell Physiology, 1979, 20, 1349-1357.	1.5	72
26	Effect of silicon deficiency on secondary cell wall synthesis in rice leaf. Journal of Plant Research, 2012, 125, 771-779.	1.2	69
27	In vitro molecular weight increase in xyloglucans by an apoplastic enzyme preparation from epicotyls of Vigna angularis. Physiologia Plantarum, 1991, 82, 490-497.	2.6	68
28	<scp>XTH</scp>20 and <scp>XTH</scp>19 regulated by <scp>ANAC</scp>071 under auxin flow are involved in cell proliferation in incised Arabidopsis inflorescence stems. Plant Journal, 2014, 80, 604-614.	2.8	66
29	Endo-xyloglucan transferase, a new class of transferase involved in cell wall construction. Journal of Plant Research, 1995, 108, 137-148.	1.2	62
30	Expression of Endoxyloglucan Transferase Genes inacaulis Mutants of Arabidopsis. Plant Physiology, 1999, 121, 715-722.	2.3	62
31	The GLABRA2 homeodomain protein directly regulates CESA5 and XTH17 gene expression in Arabidopsis roots. Plant Journal, 2009, 60, 564-574.	2.8	62
32	Endoxyloglucan Transferase is Localized both in the Cell Plate and in the Secretory Pathway Destined for the Apoplast in Tobacco Cells. Plant and Cell Physiology, 2001, 42, 292-300.	1.5	61
33	The plant cell-wall enzyme AtXTH3 catalyses covalent cross-linking between cellulose and cello-oligosaccharide. Scientific Reports, 2017, 7, 46099.	1.6	60
34	Function of xyloglucan endotransglucosylase/hydrolases in rice. Annals of Botany, 2014, 114, 1309-1318.	1.4	59
35	Acid pH-Induced Structural Changes in Cell Wall Xyloglucans in Vigna Angularis Epicotyl Segments. Plant Science Letters, 1982, 28, 87-94.	1.9	57
36	Construction and restructuring of the cellulose-xyloglucan framework in the apoplast as mediated by the xyloglucan-related protein familyâ€"A hypothetical scheme. Journal of Plant Research, 1998, 111, 159-166.	1.2	56

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37	Biological implications of the occurrence of 32 members of the XTH (xyloglucan) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 747 T Journal, 2010, 64, 645-656.	2.8	53
38	The Matrix Polysaccharide (1;3,1;4)-Î²-d-Glucan is Involved in Silicon-Dependent Strengthening of Rice Cell Wall. Plant and Cell Physiology, 2015, 56, 268-276.	1.5	52
39	Identification and characterization of Arabidopsis thaliana genes involved in xylem secondary cell walls. Journal of Plant Research, 2006, 119, 189-194.	1.2	46
40	Cell wall modification by the xyloglucan endotransglucosylase/hydrolase <scp>XTH19</scp> influences freezing tolerance after cold and subâ€zero acclimation. Plant, Cell and Environment, 2021, 44, 915-930.	2.8	43
41	Comprehensive approach to genes involved in cell wall modifications in Arabidopsis thaliana. Plant Molecular Biology, 2005, 58, 177-192.	2.0	39
42	Enzymic Analysis of Feruloylated Arabinoxylans (Feraxan) Derived from Zea mays Cell Walls I. Plant Physiology, 1988, 87, 883-890.	2.3	38
43	Roles of the XTH Protein Family in the Expanding Cell. , 2006, , 89-116.		37
44	Two Azuki Bean XTH Genes, VaXTH1 and VaXTH2, with Similar Tissue-Specific Expression Profiles, are Differently Regulated by Auxin. Plant and Cell Physiology, 2003, 44, 16-24.	1.5	36
45	A conserved regulatory mechanism mediates the convergent evolution of plant shoot lateral organs. PLoS Biology, 2019, 17, e3000560.	2.6	34
46	Genotypic Variations in Non-Structural Carbohydrate and Cell-Wall Components of the Stem in Rice, Sorghum, and Sugar Vane. Bioscience, Biotechnology and Biochemistry, 2011, 75, 1104-1112.	0.6	33
47	Enzymic Analysis of Feruloylated Arabinoxylans (Feraxan) Derived from Zea mays Cell Walls. Plant Physiology, 1989, 91, 242-248.	2.3	29
48	Roles of auxin and gibberellic acid in growth and maturation of epicotyls of Vigna angularis: Cell wall changes. Physiologia Plantarum, 1982, 56, 38-45.	2.6	28
49	Diversity of Pectin Rhamnogalacturonan I Rhamnosyltransferases in Glycosyltransferase Family 106. Frontiers in Plant Science, 2020, 11, 997.	1.7	27
50	Carbohydrate-Binding Module of a Rice Endo-Î²-1,4-glycanase, OsCel9A , Expressed in Auxin-Induced Lateral Root Primordia, is Post-Translationally Truncated. Plant and Cell Physiology, 2006, 47, 1555-1571.	1.5	25
51	The AtXTH28 Gene, a Xyloglucan Endotransglucosylase/Hydrolase, is Involved in Automatic Self-Pollination in Arabidopsis thaliana. Plant and Cell Physiology, 2008, 50, 413-422.	1.5	24
52	A genome-based approach to study the mechanisms by which cell-wall type is defined and constructed by the collaborative actions of cell-wall-related enzymes. Journal of Plant Research, 2002, 115, 303-307.	1.2	21
53	Quantitative confocal imaging method for analyzing cellulose dynamics during cell wall regeneration in Arabidopsis mesophyll protoplasts. Plant Direct, 2017, 1, e00021.	0.8	21
54	Cryogenian Origin and Subsequent Diversification of the Plant Cell-Wall Enzyme XTH Family. Plant and Cell Physiology, 2021, 62, 1874-1889.	1.5	20

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55	Editorial: An Emerging View of Plant Cell Walls as an Apoplastic Intelligent System. Plant and Cell Physiology, 2015, 56, 177-179.	1.5	18
56	Interspecific Signaling Between the Parasitic Plant and the Host Plants Regulate Xylem Vessel Cell Differentiation in Haustoria of Cuscuta campestris. Frontiers in Plant Science, 2020, 11, 193.	1.7	18
57	Enzymic Analysis of Feruloylated Arabinoxylans (Feraxan) Derived from Zea mays Cell Walls. Plant Physiology, 1990, 93, 396-402.	2.3	17
58	Xyloglucan Is Not Essential for the Formation and Integrity of the Cellulose Network in the Primary Cell Wall Regenerated from Arabidopsis Protoplasts. Plants, 2020, 9, 629.	1.6	17
59	JAXA Space Plant Research on the ISS with European Modular Cultivation System. Uchu Seibutsu Kagaku, 2007, 21, 62-66.	1.0	14
60	Mechanical load induces upregulation of transcripts for a set of genes implicated in secondary wall formation in the supporting tissue of Arabidopsis thaliana. Journal of Plant Research, 2009, 122, 651-659.	1.2	14
61	Stimulation of Cell Elongation by Tetraploidy in Hypocotyls of Dark-Grown Arabidopsis Seedlings. PLoS ONE, 2015, 10, e0134547.	1.1	14
62	Arabinogalactan Proteins Accumulate in the Cell Walls of Searching Hyphae of the Stem Parasitic Plants, Cuscuta campestris and Cuscuta japonica. Plant and Cell Physiology, 2017, 58, 1868-1877.	1.5	13
63	Chapter 5 Plant Responses to Simulated Microgravity. Advances in Space Biology and Medicine, 1994, 4, 111-126.	0.5	12
64	Arabidopsis Regenerating Protoplast: A Powerful Model System for Combining the Proteomics of Cell Wall Proteins and the Visualization of Cell Wall Dynamics. Proteomes, 2016, 4, 34.	1.7	10
65	Structural Alteration of Rice Pectin Affects Cell Wall Mechanical Strength and Pathogenicity of the Rice Blast Fungus Under Weak Light Conditions. Plant and Cell Physiology, 2021, 62, 641-649.	1.5	10
66	In vitro molecular weight increase in xyloglucans by an apoplastic enzyme preparation from epicotyls of Vigna angularis. Physiologia Plantarum, 1991, 82, 490-497.	2.6	10
67	Growth Regulation Mechanisms in Higher Plants under Microgravity Conditions. Changes in Cell Wall Metabolism.. Uchu Seibutsu Kagaku, 2000, 14, 75-96.	1.0	9
68	Host-produced ethylene is required for marked cell expansion and endoreduplication in dodder search hyphae. Plant Physiology, 2021, 185, 491-502.	2.3	8
69	Possible pathways linking ploidy level to cell elongation and cuticular function in hypocotyls of dark-grown Arabidopsis seedlings. Plant Signaling and Behavior, 2016, 11, e1118597.	1.2	7
70	Root-knot nematodes modulate cell walls during root-knot formation in Arabidopsis roots. Journal of Plant Research, 2020, 133, 419-428.	1.2	6
71	Reverse Genetic Approach to Exploring Genes Responsible for Cell-Wall Dynamics in Supporting Tissues of Arabidopsis thaliana under Microgravity Conditions. Uchu Seibutsu Kagaku, 2007, 21, 48-55.	1.0	6
72	Preparation and Outline of Space-Based Studies on Gravity Responses and Cell Wall Formation in Plants. Uchu Seibutsu Kagaku, 2009, 23, 115-120.	1.0	6

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73	An enzyme probe for the resolution of glucuronoxylan and glucuronoarabinoxylan structures. Food Hydrocolloids, 1991, 5, 197-207.	5.6	5
74	Protein ligand-tethered synthetic calcium indicator for localization control and spatiotemporal calcium imaging in plant cells. Bioorganic and Medicinal Chemistry Letters, 2016, 26, 9-14.	1.0	5
75	Cell Wall Dynamics in Tobacco BY-2 Cells. Biotechnology in Agriculture and Forestry, 2004, , 217-230.	0.2	4
76	Varietal Differences in Cell Wall Î²-(1â†'3),(1â†'4)-Glucan and Nonstructural Carbohydrate in Rice Stems during the Grain Filling Stage. Plant Production Science, 2013, 16, 335-341.	0.9	4
77	Histochemical Staining of Silica Body in Rice Leaf Blades. Bio-protocol, 2015, 5, .	0.2	3
78	Implication of Xyloglucan Related Protein(XRP) Family in Regulation of Plant Growth and Development.. Trends in Glycoscience and Glycotechnology, 1997, 9, 233-234.	0.0	3
79	Effects of 5-FdUrd on the Cell Wall Composition of Sinapis alba Hypocotyls. Zeitschrift FÃ¼r Pflanzenphysiologie, 1981, 103, 87-93.	1.4	2
80	From the editor-in-chief: Toward a new era for the Journal of Plant Research. Journal of Plant Research, 2007, 120, 1-2.	1.2	2
81	Laser micromarking technique in studying the negative gravitropism in pea stem. Plant Biotechnology, 2020, 37, 485-488.	0.5	1
82	Apoplasto of plants - 4. Construction of frame of apoplasto.. Kagaku To Seibutsu, 1997, 35, 790-797.	0.0	0
83	New Directions to Post-genomic Cell Wall Research. Plant and Cell Physiology, 2002, 43, 1397-1397.	1.5	0
84	From the new Editor-in-Chief. Journal of Plant Research, 2005, 118, 235-236.	1.2	0
85	Announcement of JPR Awards 2006. Journal of Plant Research, 2006, 119, 559-560.	1.2	0
86	Announcement of JPR Awards 2007. Journal of Plant Research, 2007, 120, 583-584.	1.2	0
87	Looking toward the future of plant biology and the Journal of Plant Research. Journal of Plant Research, 2008, 121, 1-2.	1.2	0
88	Awards and changes at the Journal of Plant Research. Journal of Plant Research, 2008, 121, 535-536.	1.2	0
89	Cell Wall-Related Genes Involved in Supporting Tissue Formation and Transcriptional Regulation in Arabidopsis thaliana. Uchu Seibutsu Kagaku, 2009, 23, 121-129.	1.0	0