Shuichi Yanagisawa

List of Publications by Year
in descending order

106 papers	9,008 citations	44069 48 h-index	43889 91 g-index
107 all docs	107 docs citations	107 times ranked	7843 citing authors

#	Article	IF	Citations
1	EIN3-Dependent Regulation of Plant Ethylene Hormone Signaling by Two Arabidopsis F Box Proteins. Cell, 2003, 115, 679-689.	28.9	681
2	Differential regulation of EIN3 stability by glucose and ethylene signalling in plants. Nature, 2003, 425, 521-525.	27.8	467
3	Discovery of nitrateâ€"CPKâ€"NLP signalling in central nutrientâ€"growth networks. Nature, 2017, 545, 311-316.	27.8	425
4	Arabidopsis EIN3-binding F-box 1 and 2 form ubiquitin-protein ligases that repress ethylene action and promote growth by directing EIN3 degradation. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 6803-6808.	7.1	410
5	The Dof family of plant transcription factors. Trends in Plant Science, 2002, 7, 555-560.	8.8	383
6	Diversity and similarity among recognition sequences of Dof transcription factors. Plant Journal, 1999, 17, 209-214.	5.7	343
7	Arabidopsis NIN-like transcription factors have a central role in nitrate signalling. Nature Communications, 2013, 4, 1617.	12.8	327
8	Dof Domain Proteins: Plant-Specific Transcription Factors Associated with Diverse Phenomena Unique to Plants. Plant and Cell Physiology, 2004, 45, 386-391.	3.1	320
9	Metabolic engineering with Dof1 transcription factor in plants: Improved nitrogen assimilation and growth under low-nitrogen conditions. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 7833-7838.	7.1	307
10	Involvement of Maize Dof Zinc Finger Proteins in Tissue-Specific and Light-Regulated Gene Expression. Plant Cell, 1998, 10, 75-89.	6.6	277
11	Dof1 and Dof2 transcription factors are associated with expression of multiple genes involved in carbon metabolism in maize. Plant Journal, 2000, 21, 281-288.	5.7	260
12	A NIGT1-centred transcriptional cascade regulates nitrate signalling and incorporates phosphorus starvation signals in Arabidopsis. Nature Communications, 2018, 9, 1376.	12.8	202
13	Ethylene-gibberellin signaling underlies adaptation of rice to periodic flooding. Science, 2018, 361, 181-186.	12.6	188
14	Introduction of the ZmDof1 gene into rice enhances carbon and nitrogen assimilation under lowâ€nitrogen conditions. Plant Biotechnology Journal, 2011, 9, 826-837.	8.3	168
15	Nano Scale Proteomics Revealed the Presence of Regulatory Proteins Including Three FT-Like proteins in Phloem and Xylem Saps from Rice. Plant and Cell Physiology, 2008, 49, 767-790.	3.1	165
16	Identification of Znâ€"Nicotianamine and Feâ€"2â€²-Deoxymugineic Acid in the Phloem Sap from Rice Plants (Oryza sativa L.). Plant and Cell Physiology, 2012, 53, 381-390.	3.1	160
17	Ethylene signaling in Arabidopsis involves feedback regulation via the elaborate control of <i>EBF2</i> expression by EIN3. Plant Journal, 2008, 55, 821-831.	5.7	153
18	The Transcriptional Cascade in the Heat Stress Response of Arabidopsis Is Strictly Regulated at the Level of Transcription Factor Expression. Plant Cell, 2016, 28, 181-201.	6.6	152

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19	Repression of Nitrogen Starvation Responses by Members of the Arabidopsis GARP-Type Transcription Factor NIGT1/HRS1 Subfamily. Plant Cell, 2018, 30, 925-945.	6.6	143
20	A novel DNA-binding domain that may form a single zinc finger motif. Nucleic Acids Research, 1995, 23, 3403-3410.	14.5	128
21	A Dof Transcription Factor, SCAP1, Is Essential for the Development of Functional Stomata in Arabidopsis. Current Biology, 2013, 23, 479-484.	3.9	125
22	Identification of a nitrateâ€responsive <i>cis</i>â€element in the Arabidopsis <i>NIR1</i> promoter defines the presence of multiple <i>cis</i>â€regulatory elements for nitrogen response. Plant Journal, 2010, 63, 269-282.	5.7	106
23	Possible chemical forms of cadmium and varietal differences in cadmium concentrations in the phloem sap of rice plants (<i>Oryza sativa</i>L.). Soil Science and Plant Nutrition, 2010, 56, 839-847.	1.9	104
24	Dof DNA-Binding Domains of Plant Transcription Factors Contribute to Multiple Protein-Protein Interactions. FEBS Journal, 1997, 250, 403-410.	0.2	95
25	A phytochrome-B-mediated regulatory mechanism of phosphorus acquisition. Nature Plants, 2018, 4, 1089-1101.	9.3	89
26	Metabolome and Photochemical Analysis of Rice Plants Overexpressing Arabidopsis NAD Kinase Gene Â Â. Plant Physiology, 2010, 152, 1863-1873.	4.8	82
27	Sequential activation of two Dof transcription factor gene promoters during vascular development in Arabidopsis thaliana. Plant Physiology and Biochemistry, 2007, 45, 623-629.	5.8	81
28	Two seasonsâ€™ study on nifH gene expression and nitrogen fixation by diazotrophic endophytes in sugarcane (Saccharum spp. hybrids): expression of nifH genes similar to those of rhizobia. Plant and Soil, 2011, 338, 435-449.	3.7	81
29	Pleiotropic Modulation of Carbon and Nitrogen Metabolism in Arabidopsis Plants Overexpressing the<i>NAD kinase2</i>Gene Â. Plant Physiology, 2009, 151, 100-113.	4.8	79
30	A Jasmonate-Activated MYC2â€“Dof2.1â€“MYC2 Transcriptional Loop Promotes Leaf Senescence in Arabidopsis. Plant Cell, 2020, 32, 242-262.	6.6	79
31	Effects of Elevated CO2 on Levels of Primary Metabolites and Transcripts of Genes Encoding Respiratory Enzymes and Their Diurnal Patterns in Arabidopsis thaliana: Possible Relationships with Respiratory Rates. Plant and Cell Physiology, 2014, 55, 341-357.	3.1	75
32	Transcription factors involved in controlling the expression of nitrate reductase genes in higher plants. Plant Science, 2014, 229, 167-171.	3.6	71
33	Specificity of the Stimulatory Interaction between Chromosomal HMGB Proteins and the Transcription Factor Dof2 and Its Negative Regulation by Protein Kinase CK2-mediated Phosphorylation. Journal of Biological Chemistry, 2002, 277, 32438-32444.	3.4	70
34	High CO2 Triggers Preferential Root Growth of Arabidopsis thaliana Via Two Distinct Systems Under Low pH and Low N Stresses. Plant and Cell Physiology, 2014, 55, 269-280.	3.1	68
35	Nitrateâ€inducible NIGT1 proteins modulate phosphate uptake and starvation signalling via transcriptional regulation of <i>SPX</i> genes. Plant Journal, 2020, 102, 448-466.	5.7	68
36	A Nitrate-Inducible GARP Family Gene Encodes an Auto-Repressible Transcriptional Repressor in Rice. Plant and Cell Physiology, 2013, 54, 506-517.	3.1	66

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37	Multilayered Regulation of Membrane-Bound ONAC054 Is Essential for Abscisic Acid-Induced Leaf Senescence in Rice. Plant Cell, 2020, 32, 630-649.	6.6	66
38	Screening for the target gene of cyanobacterial cAMP receptor protein SYCRP1. Molecular Microbiology, 2002, 43, 843-853.	2.5	63
39	Emergence of a new step towards understanding the molecular mechanisms underlying nitrate-regulated gene expression. Journal of Experimental Botany, 2014, 65, 5589-5600.	4.8	63
40	Evolutionary Processes During the Formation of the Plant-Specific Dof Transcription Factor Family. Plant and Cell Physiology, 2007, 48, 179-185.	3.1	59
41	Heterogeneous Sp1 mRNAs in Human HepG2 Cells Include a Product of Homotypic trans-Splicing. Journal of Biological Chemistry, 2000, 275, 38067-38072.	3.4	57
42	The Transcriptional Activation Domain of the Plant-Specific Dof1 Factor Functions in Plant, Animal, and Yeast Cells. Plant and Cell Physiology, 2001, 42, 813-822.	3.1	56
43	Nitrite Transport Activity of a Novel HPP Family Protein Conserved in Cyanobacteria and Chloroplasts. Plant and Cell Physiology, 2014, 55, 1311-1324.	3.1	56
44	The Regulatory Region Controlling the Nitrate-Responsive Expression of a Nitrate Reductase Gene, NIA1, in Arabidopsis. Plant and Cell Physiology, 2011, 52, 824-836.	3.1	54
45	Characterization of Metabolic States of Arabidopsis thaliana Under Diverse Carbon and Nitrogen Nutrient Conditions via Targeted Metabolomic Analysis. Plant and Cell Physiology, 2014, 55, 306-319.	3.1	53
46	Further analysis of cDNA clones for maize phosphoenolpyruvate carboxylase involved in C4photosynthesis Nucleotide sequence of entire open reading frame and evidence for polyadenylation of mRNA at multiple sites in vivo. FEBS Letters, 1988, 229, 107-110.	2.8	52
47	Molecular Evolution of Phosphoenolpyruvate Carboxylase for C4 Photosynthesis in Maize: Comparison of Its cDNA Sequence with a Newly Isolated cDNA Encoding an Isozyme Involved in the Anaplerotic Function1. Journal of Biochemistry, 1992, 112, 147-154.	1.7	52
48	Concentrations of metals and potential metalâ€binding compounds and speciation of Cd, Zn and Cu in phloem and xylem saps from castor bean plants (<i>Ricinus communis</i>) treated with four levels of cadmium. Physiologia Plantarum, 2015, 154, 243-255.	5.2	52
49	Two Distinct Families of Protein Kinases Are Required for Plant Growth under High External Mg²⁺ Concentrations in Arabidopsis. Plant Physiology, 2015, 167, 1039-1057.	4.8	51
50	The evolutionary events necessary for the emergence of symbiotic nitrogen fixation in legumes may involve a loss of nitrate responsiveness of the NIN transcription factor. Plant Signaling and Behavior, 2013, 8, e25975.	2.4	50
51	The role of protein-protein interactions mediated by the PB1 domain of NLP transcription factors in nitrate-inducible gene expression. BMC Plant Biology, 2019, 19, 90.	3.6	48
52	Identification and Characterization of a Novel cAMP Receptor Protein in the Cyanobacterium Synechocystis sp. PCC 6803. Journal of Biological Chemistry, 2000, 275, 6241-6245.	3.4	46
53	Chemical forms of iron in xylem sap from graminaceous and non-graminaceous plants. Soil Science and Plant Nutrition, 2014, 60, 460-469.	1.9	45
54	Gene regulatory network and its constituent transcription factors that control nitrogenâ€deficiency responses in rice. New Phytologist, 2020, 227, 1434-1452.	7.3	45

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55	Reduced Expression of <i>APUM24</i>, Encoding a Novel rRNA Processing Factor, Induces Sugar-Dependent Nucleolar Stress and Altered Sugar Responses in <i>Arabidopsis thaliana</i>. Plant Cell, 2018, 30, 209-227.	6.6	44
56	Delay in Synthesis of the 3â€² Splice Site Promotes trans-Splicing of the Preceding 5â€² Splice Site. Molecular Cell, 2005, 18, 245-251.	9.7	39
57	Application of Rice Nuclear Proteome Analysis to the Identification of Evolutionarily Conserved and Glucose-Responsive Nuclear Proteins. Journal of Proteome Research, 2009, 8, 3912-3924.	3.7	39
58	Direct transcriptional activation of BT genes by NLP transcription factors is a key component of the nitrate response in Arabidopsis. Biochemical and Biophysical Research Communications, 2017, 483, 380-386.	2.1	39
59	Light signalling-induced regulation of nutrient acquisition and utilisation in plants. Seminars in Cell and Developmental Biology, 2018, 83, 123-132.	5.0	39
60	The Ubiquitinâ€“Proteasome Pathway is Involved in Rapid Degradation of Phosphoenolpyruvate Carboxylase Kinase for C4 Photosynthesis. Plant and Cell Physiology, 2005, 46, 389-398.	3.1	37
61	Transcription factors in plants: Physiological functions and regulation of expression. Journal of Plant Research, 1998, 111, 363-371.	2.4	34
62	Perception, transduction, and integration of nitrogen and phosphorus nutritional signals in the transcriptional regulatory network in plants. Journal of Experimental Botany, 2019, 70, 3709-3717.	4.8	34
63	MONOPTEROS directly activates the auxin-inducible promoter of the Dof5.8 transcription factor gene in Arabidopsis thaliana leaf provascular cells. Journal of Experimental Botany, 2015, 66, 283-291.	4.8	33
64	Nitrate-responsive NIN-like protein transcription factors perform unique and redundant roles in Arabidopsis. Journal of Experimental Botany, 2021, 72, 5735-5750.	4.8	32
65	Phosphoenolpyruvate Carboxylase Prevalent in Maize Roots: Isolation of a cDNA Clone and Its Use for Analyses of the Gene and Gene Expression1. Journal of Biochemistry, 1990, 107, 165-168.	1.7	31
66	Molecular basis of the nitrogen response in plants. Soil Science and Plant Nutrition, 2017, 63, 329-341.	1.9	31
67	Involvement of PpDof1 transcriptional repressor in the nutrient condition-dependent growth control of protonemal filaments in Physcomitrella patens. Journal of Experimental Botany, 2012, 63, 3185-3197.	4.8	30
68	Overexpression of BAX INHIBITOR-1 Links Plasma Membrane Microdomain Proteins to Stress Â. Plant Physiology, 2015, 169, 1333-1343.	4.8	30
69	Distinct modulations of the hexokinase1-mediated glucose response and hexokinase1-independent processes by HYS1/CPR5 in Arabidopsis. Journal of Experimental Botany, 2007, 58, 3239-3248.	4.8	29
70	Plant Responses to CO2: Background and Perspectives. Plant and Cell Physiology, 2014, 55, 237-240.	3.1	29
71	Maize Phosphoenolpyruvate Carboxylase Involved in C4 Photosynthesis: Nucleotide Sequence Analysis of the 5' Flanking Region of the Gene1. Journal of Biochemistry, 1989, 106, 982-987.	1.7	28
72	Multiple interactions between tissue-specific nuclear proteins and the promoter of the phosphoenolpyruvate carboxylase gene for C4 photosynthesis in Zea mays. Molecular Genetics and Genomics, 1990, 224, 325-332.	2.4	28

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73	Roles of the transcriptional regulation mediated by the nitrate-responsive cis-element in higher plants. Biochemical and Biophysical Research Communications, 2011, 411, 708-713.	2.1	27
74	An NLP-binding site in the 3' flanking region of the nitrate reductase gene confers nitrate-inducible expression in<i>Arabidopsis thaliana</i>(L.) Heynh.. Soil Science and Plant Nutrition, 2013, 59, 612-620.	1.9	26
75	Characterization of plant eukaryotic translation initiation factor 6 (eIF6) genes: The essential role in embryogenesis and their differential expression in Arabidopsis and rice. Biochemical and Biophysical Research Communications, 2010, 397, 673-678.	2.1	24
76	Wound-Induced Expression of the FAD7Gene Is Mediated by Different Regulatory Domains of Its Promoter in Leaves/Stems and Roots. Plant Physiology, 1999, 121, 1239-1246.	4.8	21
77	Enhanced photosynthetic capacity increases nitrogen metabolism through the coordinated regulation of carbon and nitrogen assimilation in Arabidopsis thaliana. Journal of Plant Research, 2017, 130, 909-927.	2.4	21
78	MNF1, a leaf tissue-specific DNA-binding protein of maize, interacts with the cauliflower mosaic virus 35S promoter as well as the C4 photosynthetic phosphoenolpyruvate carboxylase gene promoter. Plant Molecular Biology, 1992, 19, 545-553.	3.9	20
79	Enhanced NRT1.1/NPF6.3 expression in shoots improves growth under nitrogen deficiency stress in Arabidopsis. Communications Biology, 2021, 4, 256.	4.4	20
80	Identification and Characterization of Positive Regulatory Elements in the Human Glyceraldehyde 3-Phosphate Dehydrogenase Gene Promoter. Journal of Biochemistry, 1997, 122, 271-278.	1.7	19
81	Possible Involvement of the 5â€²-Flanking Region and the 5â€²UTR of Plastid accD Gene in NEP-Dependent Transcription. Plant and Cell Physiology, 2004, 45, 176-186.	3.1	19
82	Characterization of a nitrate-inducible transcriptional repressor NIGT1 provides new insights into DNA recognition by the GARP family proteins. Plant Signaling and Behavior, 2013, 8, e24447.	2.4	19
83	NIGT1 family proteins exhibit dual mode DNA recognition to regulate nutrient response-associated genes in Arabidopsis. PLoS Genetics, 2020, 16, e1009197.	3.5	18
84	Capillary electrophoresisâ€"electrospray ionization-mass spectrometry using fused-silica capillaries to profile anionic metabolites. Metabolomics, 2010, 6, 529-540.	3.0	17
85	Functional genomics of the Dof transcription factor family genes in suspension-cultured cells of Arabidopsis thaliana. Plant Biotechnology, 2009, 26, 15-28.	1.0	16
86	Proteomic Characterization of the Greening Process in Rice Seedlings Using the MS Spectral Intensity-based Label Free Method. Journal of Proteome Research, 2012, 11, 331-347.	3.7	16
87	Quantification of zinc transport via the phloem to the grain in rice plants (<i>Oryza sativa</i>L.) at early grain-filling by a combination of mathematical modeling and⁶⁵Zn tracing. Soil Science and Plant Nutrition, 2013, 59, 750-755.	1.9	16
88	Transcriptional repression caused by Dof5.8 is involved in proper vein network formation in Arabidopsis thaliana leaves. Journal of Plant Research, 2015, 128, 643-652.	2.4	16
89	Environmental Control of Phosphorus Acquisition: A Piece of the Molecular Framework Underlying Nutritional Homeostasis. Plant and Cell Physiology, 2021, 62, 573-581.	3.1	15
90	The trans-spliced variants of Sp1 mRNA in rat. Biochemical and Biophysical Research Communications, 2002, 298, 156-162.	2.1	13

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91	The Pre-rRNA Processing Complex in Arabidopsis Includes Two WD40-Domain-Containing Proteins Encoded by Glucose-Inducible Genes and Plant-Specific Proteins. Molecular Plant, 2016, 9, 312-315.	8.3	13
92	Nucleolar stress and sugar response in plants. Plant Signaling and Behavior, 2018, 13, e1442975.	2.4	12
93	Structure, Function, and Evolution of the Dof Transcription Factor Family. , 2016, , 183-197.		11
94	15N Tracing Studies on In Vitro Reactions of Ferredoxin-Dependent Nitrite Reductase and Glutamate Synthase Using Reconstituted Electron Donation Systems. Plant and Cell Physiology, 2015, 56, 1154-1161.	3.1	9
95	Overexpression of a Brix Domain-Containing Ribosome Biogenesis Factor ARPF2 and its Interactor ARRS1 Causes Morphological Changes and Lifespan Extension in Arabidopsis thaliana. Frontiers in Plant Science, 2018, 9, 1177.	3.6	9
96	RWP-RK domain-containing transcription factors in the Viridiplantae: their biology and phylogenetic relationships. Journal of Experimental Botany, 0, , .	4.8	7
97	Two different mechanisms control ethylene sensitivity in Arabidopsis via the regulation ofEBF2expression. Plant Signaling and Behavior, 2008, 3, 749-751.	2.4	6
98	Effect of phytochrome-mediated red light signaling on phosphorus uptake and accumulation in rice. Soil Science and Plant Nutrition, 2020, 66, 745-754.	1.9	6
99	Diurnal expression of <i>CONSTANS-like</i> genes is independent of the function of cycling DOF factor (CDF)-like transcriptional repressors in <i>Physcomitrella patens</i>. Plant Biotechnology, 2014, 31, 293-299.	1.0	4
100	Signaling crosstalk between ethylene and other molecules. Plant Biotechnology, 2005, 22, 401-407.	1.0	3
101	Production of Active Phosphoenol-pyruvate Carboxylase ofZea maysinEscherichia coliEncoded by a Full-length cDNA. Agricultural and Biological Chemistry, 1990, 54, 241-243.	0.3	2
102	Transcription Factor-Based Genetic Engineering to Increase Nitrogen Use Efficiency. , 2018, , 37-55.		2
103	Delineation of Nitrogen Signaling Networks: Computational Approaches in the Big Data Era. Molecular Plant, 2019, 12, 150-152.	8.3	2
104	Arabidopsis nitrate-induced aspartate oxidase gene expression is necessary to maintain metabolic balance under nitrogen nutrient fluctuation. Communications Biology, 2022, 5, 432.	4.4	2
105	Ribosome biogenesis factor OLI2 and its interactor BRX1-2 are associated with morphogenesis and lifespan extension in <i>Arabidopsis thaliana</i>. Plant Biotechnology, 2021, 38, 117-125.	1.0	1
106	Two independent cis â€acting elements are required for the guard cellâ€specific expression of SCAP1 , which is essential for late stomatal development. Plant Journal, 2022, , .	5.7	1