

Tomonobu Kusano

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11678024/publications.pdf>

Version: 2024-02-01

89
papers

4,645
citations

76326

40
h-index

102487

66
g-index

90
all docs

90
docs citations

90
times ranked

4362
citing authors

#	ARTICLE	IF	CITATIONS
1	A protective role for the polyamine spermine against drought stress in Arabidopsis. <i>Biochemical and Biophysical Research Communications</i> , 2007, 352, 486-490.	2.1	285
2	Advances in polyamine research in 2007. <i>Journal of Plant Research</i> , 2007, 120, 345-350.	2.4	247
3	The polyamine spermine protects against high salt stress in Arabidopsis thaliana. <i>FEBS Letters</i> , 2006, 580, 6783-6788.	2.8	200
4	Antagonistic Interactions between the SA and JA Signaling Pathways in Arabidopsis Modulate Expression of Defense Genes and Gene-for-Gene Resistance to Cucumber Mosaic Virus. <i>Plant and Cell Physiology</i> , 2004, 45, 803-809.	3.1	163
5	Two maize genes encoding omega-3 fatty acid desaturase and their differential expression to temperature. <i>Plant Molecular Biology</i> , 1998, 36, 297-306.	3.9	132
6	Spermine signalling in tobacco: activation of mitogen-activated protein kinases by spermine is mediated through mitochondrial dysfunction. <i>Plant Journal</i> , 2003, 36, 820-829.	5.7	132
7	7-Methylxanthine Methyltransferase of Coffee Plants. <i>Journal of Biological Chemistry</i> , 2001, 276, 8213-8218.	3.4	130
8	A subset of hypersensitive response marker genes, including HSR203J, is the downstream target of a spermine signal transduction pathway in tobacco. <i>Plant Journal</i> , 2004, 40, 586-595.	5.7	129
9	The polyamine spermine protects Arabidopsis from heat stress-induced damage by increasing expression of heat shock-related genes. <i>Transgenic Research</i> , 2013, 22, 595-605.	2.4	127
10	LIP19, a Basic Region Leucine Zipper Protein, is a Fos-like Molecular Switch in the Cold Signaling of Rice Plants. <i>Plant and Cell Physiology</i> , 2005, 46, 1623-1634.	3.1	115
11	Spermine signaling plays a significant role in the defense response of Arabidopsis thaliana to cucumber mosaic virus. <i>Journal of Plant Physiology</i> , 2009, 166, 626-643.	3.5	107
12	Constitutively and highly expressed Oryza sativa polyamine oxidases localize in peroxisomes and catalyze polyamine back conversion. <i>Amino Acids</i> , 2012, 42, 867-876.	2.7	104
13	A maize DNA-binding factor with a bZIP motif is induced by low temperature. <i>Molecular Genetics and Genomics</i> , 1995, 248, 507-517.	2.4	99
14	Characterization of five polyamine oxidase isoforms in Arabidopsis thaliana. <i>Plant Cell Reports</i> , 2010, 29, 955-965.	5.6	98
15	Identification of Tobacco HIN1 and Two Closely Related Genes as Spermine-Responsive Genes and their Differential Expression During the Tobacco Mosaic Virus-Induced Hypersensitive Response and During Leaf- and Flower-Senescence. <i>Plant Molecular Biology</i> , 2004, 54, 613-622.	3.9	89
16	Polyamine Oxidase5 Regulates Arabidopsis Growth through Thermospermine Oxidase Activity. <i>Plant Physiology</i> , 2014, 165, 1575-1590.	4.8	89
17	Novel Cysteine-Rich Peptides from <i>Digitaria ciliaris</i> and <i>Oryza sativa</i> Enhance Tolerance to Cadmium by Limiting its Cellular Accumulation. <i>Plant and Cell Physiology</i> , 2009, 50, 106-117.	3.1	84
18	Molecular and genetic characterization of the gene family encoding the voltage-dependent anion channel in Arabidopsis. <i>Journal of Experimental Botany</i> , 2011, 62, 4773-4785.	4.8	84

#	ARTICLE	IF	CITATIONS
19	Up-regulation of <i>Arabidopsis thaliana</i> NHL10 in the hypersensitive response to Cucumber mosaic virus infection and in senescing leaves is controlled by signalling pathways that differ in salicylate involvement. <i>Planta</i> , 2004, 218, 740-750.	3.2	83
20	Quantitative analysis of plant polyamines including thermospermine during growth and salinity stress. <i>Plant Physiology and Biochemistry</i> , 2010, 48, 527-533.	5.8	83
21	Specific Binding of a 14-3-3 Protein to Autophosphorylated WPK4, an SNF1-related Wheat Protein Kinase, and to WPK4-phosphorylated Nitrate Reductase. <i>Journal of Biological Chemistry</i> , 2000, 275, 31695-31700.	3.4	79
22	Low-temperature-dependent expression of a rice gene encoding a protein with a leucine-zipper motif. <i>Molecular Genetics and Genomics</i> , 1993, 240, 1-8.	2.4	67
23	Generation of Mercury-Hyperaccumulating Plants through Transgenic Expression of the Bacterial Mercury Membrane Transport Protein MerC. <i>Transgenic Research</i> , 2006, 15, 615-625.	2.4	66
24	NtbZIP60, an endoplasmic reticulum-localized transcription factor, plays a role in the defense response against bacterial pathogens in <i>Nicotiana tabacum</i> . <i>Journal of Plant Research</i> , 2008, 121, 603-611.	2.4	66
25	Nucleotide sequence of the <i>Thiobacillus ferrooxidans</i> chromosomal gene encoding mercuric reductase. <i>Gene</i> , 1989, 84, 47-54.	2.2	65
26	Molecular cloning, characterization and expression of an elongation factor 1 γ gene in maize. <i>Plant Molecular Biology</i> , 1995, 29, 611-615.	3.9	65
27	Voltage-dependent anion channels: their roles in plant defense and cell death. <i>Plant Cell Reports</i> , 2009, 28, 1301-1308.	5.6	64
28	Rice DEP1, encoding a highly cysteine-rich G protein β^3 subunit, confers cadmium tolerance on yeast cells and plants. <i>Journal of Experimental Botany</i> , 2013, 64, 4517-4527.	4.8	64
29	A novel strategy to produce sweeter tomato fruits with high sugar contents by fruit-specific expression of a single <i>bZIP</i> transcription factor gene. <i>Plant Biotechnology Journal</i> , 2016, 14, 1116-1126.	8.3	64
30	Polyamine Oxidase 7 is a Terminal Catabolism-Type Enzyme in <i>Oryza sativa</i> and is Specifically Expressed in Anthers. <i>Plant and Cell Physiology</i> , 2014, 55, 1110-1122.	3.1	61
31	Tobacco ZFT1, a Transcriptional Repressor with a Cys2/His2 Type Zinc Finger Motif that Functions in Spermine-Signaling Pathway. <i>Plant Molecular Biology</i> , 2005, 59, 435-448.	3.9	56
32	<i>Oryza sativa</i> polyamine oxidase 1 back-converts tetraamines, spermine and thermospermine, to spermidine. <i>Plant Cell Reports</i> , 2014, 33, 143-151.	5.6	54
33	Scots pine aminopropyltransferases shed new light on evolution of the polyamine biosynthesis pathway in seed plants. <i>Annals of Botany</i> , 2018, 121, 1243-1256.	2.9	54
34	Sucrose and Cytokinin Modulation of WPK4, a Gene Encoding a SNF1-Related Protein Kinase from Wheat. <i>Plant Physiology</i> , 1999, 121, 813-820.	4.8	53
35	An inhibitory effect of the sequence-conserved upstream open-reading frame on the translation of the main open-reading frame of <i>HsfB1</i> transcripts in <i>Arabidopsis</i> . <i>Plant, Cell and Environment</i> , 2012, 35, 2014-2030.	5.7	53
36	The Polyamine Spermine Rescues <i>Arabidopsis</i> from Salinity and Drought Stresses. <i>Plant Signaling and Behavior</i> , 2007, 2, 251-252.	2.4	52

#	ARTICLE	IF	CITATIONS
37	Plant voltage-dependent anion channels are involved in host defense against <i>Pseudomonas cichorii</i> and in Bax-induced cell death. <i>Plant Cell Reports</i> , 2009, 28, 41-51.	5.6	48
38	Deregulation of Sucrose-Controlled Translation of a bZIP-Type Transcription Factor Results in Sucrose Accumulation in Leaves. <i>PLoS ONE</i> , 2012, 7, e33111.	2.5	48
39	Reducing Cytoplasmic Polyamine Oxidase Activity in Arabidopsis Increases Salt and Drought Tolerance by Reducing Reactive Oxygen Species Production and Increasing Defense Gene Expression. <i>Frontiers in Plant Science</i> , 2016, 7, 214.	3.6	46
40	Specific Association of Transcripts of <i>tbzF</i> and <i>tbz17</i> , Tobacco Genes Encoding Basic Region Leucine Zipper-Type Transcriptional Activators, with Guard Cells of Senescing Leaves and/or Flowers. <i>Plant Physiology</i> , 2001, 127, 23-32.	4.8	45
41	Identification of seven polyamine oxidase genes in tomato (<i>Solanum lycopersicum</i> L.) and their expression profiles under physiological and various stress conditions. <i>Journal of Plant Physiology</i> , 2018, 228, 1-11.	3.5	42
42	Single amino acid alterations in Arabidopsis thaliana RCY1 compromise resistance to Cucumber mosaic virus, but differentially suppress hypersensitive response-like cell death. <i>Plant Molecular Biology</i> , 2006, 62, 669-682.	3.9	40
43	Serine Palmitoyltransferase, the First Step Enzyme in Sphingolipid Biosynthesis, Is Involved in Nonhost Resistance. <i>Molecular Plant-Microbe Interactions</i> , 2009, 22, 31-38.	2.6	37
44	Exogenous thermospermine has an activity to induce a subset of the defense genes and restrict cucumber mosaic virus multiplication in Arabidopsis thaliana. <i>Plant Cell Reports</i> , 2012, 31, 1227-1232.	5.6	35
45	Cloning and Sequence Analysis of <i>czc</i> Genes in <i>Alcaligenes</i> sp. Strain CT14. <i>Bioscience, Biotechnology and Biochemistry</i> , 1996, 60, 699-704.	1.3	34
46	Functional Dissection of a Mercuric Ion Transporter, MerC, from <i>Acidithiobacillus ferrooxidans</i> . <i>Bioscience, Biotechnology and Biochemistry</i> , 2005, 69, 1394-1402.	1.3	34
47	<i>Thiobacillus ferrooxidans</i> mer operon: sequence analysis of the promoter and adjacent genes. <i>Gene</i> , 1990, 96, 115-120.	2.2	33
48	Sequence analysis of rice dwarf phyto-reovirus genome segments S4, S5, and S6: Comparison with the equivalent wound tumor virus segments. <i>Virology</i> , 1990, 179, 446-454.	2.4	32
49	Sequence analysis of the rice dwarf phyto-reovirus segment s3 transcript encoding for the major structural core protein of 114 kDa. <i>Virology</i> , 1990, 179, 455-459.	2.4	32
50	Differential Expression of Genes Encoding Enzymes Involved in Sulfur Assimilation Pathways in Response to Wounding and Jasmonate in Arabidopsis thaliana. <i>Journal of Plant Physiology</i> , 2000, 156, 272-276.	3.5	31
51	RCY1-Mediated Resistance to Cucumber mosaic virus Is Regulated by LRR Domain-Mediated Interaction with CMV(Y) Following Degradation of RCY1. <i>Molecular Plant-Microbe Interactions</i> , 2012, 25, 1171-1185.	2.6	29
52	A novel plant cysteine-rich peptide family conferring cadmium tolerance to yeast and plants. <i>Plant Signaling and Behavior</i> , 2009, 4, 419-421.	2.4	27
53	Mercuric Ion Uptake by <i>Escherichia coli</i> Cells Producing <i>Thiobacillus ferrooxidans</i> MerC. <i>Bioscience, Biotechnology and Biochemistry</i> , 1996, 60, 1289-1292.	1.3	24
54	Arabidopsis mutant plants with diverse defects in polyamine metabolism show unequal sensitivity to exogenous cadaverine probably based on their spermine content. <i>Physiology and Molecular Biology of Plants</i> , 2014, 20, 151-159.	3.1	24

#	ARTICLE	IF	CITATIONS
55	Characterization and cloning of plasmids from the iron-oxidizing bacterium <i>Thiobacillus ferrooxidans</i> . <i>Current Microbiology</i> , 1991, 23, 321-326.	2.2	23
56	Ntdin, a Tobacco Senescence-Associated Gene, is Involved in Molybdenum Cofactor Biosynthesis. <i>Plant and Cell Physiology</i> , 2003, 44, 1037-1044.	3.1	23
57	Polyamines in Plant Stress Response. , 2015, , 155-168.		23
58	Polyamine Catabolism in Plants. , 2015, , 77-88.		21
59	POLYAMINE OXIDASE 1 from rice (<i>Oryza sativa</i>) is a functional ortholog of <i>Arabidopsis</i> POLYAMINE OXIDASE 5. <i>Plant Signaling and Behavior</i> , 2014, 9, e29773.	2.4	20
60	Quantitative measurement of the outer membrane permeability in <i>Escherichia coli</i> lpp and tol ^Δ pal mutants defines the significance of Tol ^Δ Pal function for maintaining drug resistance. <i>Journal of Antibiotics</i> , 2016, 69, 863-870.	2.0	20
61	Identification of a novel Cys2/His2-type zinc-finger protein as a component of a spermine-signaling pathway in tobacco. <i>Journal of Plant Physiology</i> , 2007, 164, 785-793.	3.5	19
62	Molecular cloning and expression of <i>Thiobacillus ferrooxidans</i> chromosomal ribulose biphosphate carboxylase genes in <i>Escherichia coli</i> . <i>Current Microbiology</i> , 1991, 22, 35-41.	2.2	18
63	The polyamine oxidase from lycophyte <i>Selaginella lepidophylla</i> (SelPAO5), unlike that of angiosperms, backconverts spermine to norspermidine. <i>FEBS Letters</i> , 2015, 589, 3071-3078.	2.8	18
64	Longer uncommon polyamines have a stronger defense gene-induction activity and a higher suppressing activity of Cucumber mosaic virus multiplication compared to that of spermine in <i>Arabidopsis thaliana</i> . <i>Plant Cell Reports</i> , 2013, 32, 1477-1488.	5.6	17
65	A cold-inducible bZIP protein gene in radish root regulated by calcium- and cycloheximide-mediated signals. <i>Plant Science</i> , 1999, 142, 57-65.	3.6	16
66	Identification of the cis-acting elements in <i>Arabidopsis thaliana</i> NHL10 promoter responsible for leaf senescence, the hypersensitive response against Cucumber mosaic virus infection, and spermine treatment. <i>Plant Science</i> , 2005, 168, 415-422.	3.6	16
67	The polyamine spermine induces the unfolded protein response via the MAPK cascade in <i>Arabidopsis</i> . <i>Frontiers in Plant Science</i> , 2015, 6, 687.	3.6	16
68	Nucleotide sequence of a rcerab16 homologue gene. <i>Plant Molecular Biology</i> , 1992, 18, 127-129.	3.9	15
69	Spermine signaling in defense reaction against avirulent viral pathogen in <i>Arabidopsis thaliana</i> . <i>Plant Signaling and Behavior</i> , 2009, 4, 316-318.	2.4	15
70	Expression profile of seven polyamine oxidase genes in rice (<i>Oryza sativa</i>) in response to abiotic stresses, phytohormones and polyamines. <i>Physiology and Molecular Biology of Plants</i> , 2021, 27, 1353-1359.	3.1	15
71	Molecular cloning and partial characterization of a tobacco cDNA encoding a small bZIP protein. <i>Biochimica Et Biophysica Acta Gene Regulatory Mechanisms</i> , 1998, 1395, 171-175.	2.4	13
72	The <i>Arabidopsis</i> voltage-dependent anion channel 2 is required for plant growth. <i>Plant Signaling and Behavior</i> , 2012, 7, 31-33.	2.4	13

#	ARTICLE	IF	CITATIONS
73	Identification of the actual coding region for polyamine oxidase 6 from rice (OsPAO6) and its partial characterization. <i>Plant Signaling and Behavior</i> , 2017, 12, e1359456.	2.4	12
74	Characterization of AtbZIP2, AtbZIP11 and AtbZIP53 from the group S basic region-leucine zipper family in <i>Arabidopsis thaliana</i> . <i>Plant Biotechnology</i> , 2006, 23, 249-258.	1.0	11
75	Spermine modulates the expression of two probable polyamine transporter genes and determines growth responses to cadaverine in <i>Arabidopsis</i> . <i>Plant Cell Reports</i> , 2016, 35, 1247-1257.	5.6	10
76	An improved method for the construction of high efficiency cDNA library in plasmid or lambda vector. <i>Nucleic Acids Research</i> , 1990, 18, 1071-1071.	14.5	9
77	Overexpression of rice OsREX1-S, encoding a putative component of the core general transcription and DNA repair factor IIIH, renders plant cells tolerant to cadmium- and UV-induced damage by enhancing DNA excision repair. <i>Planta</i> , 2014, 239, 1101-1111.	3.2	9
78	Peptidoglycan-associated outer membrane protein Mep45 of rumen anaerobe <i>Selenomonas ruminantium</i> forms a non-specific diffusion pore via its C-terminal transmembrane domain. <i>Bioscience, Biotechnology and Biochemistry</i> , 2016, 80, 1954-1959.	1.3	9
79	Identification and properties of a small protein that interacts with a tobacco bZIP-type transcription factor TBZF. <i>Plant Biotechnology</i> , 2012, 29, 395-399.	1.0	8
80	Outer Membrane Proteins Derived from Non-cyanobacterial Lineage Cover the Peptidoglycan of <i>Cyanophora paradoxa</i> Cyanelles and Serve as a Cyanelle Diffusion Channel. <i>Journal of Biological Chemistry</i> , 2016, 291, 20198-20209.	3.4	8
81	Molecules for Sensing Polyamines and Transducing Their Action in Plants. <i>Methods in Molecular Biology</i> , 2018, 1694, 25-35.	0.9	7
82	A Polyamine Oxidase from <i>Selaginella lepidophylla</i> (SelPAO5) can Replace AtPAO5 in <i>Arabidopsis</i> through Converting Thermospermine to Norspermidine instead to Spermidine. <i>Plants</i> , 2019, 8, 99.	3.5	7
83	Spatio-temporal expression analysis of <i>Arabidopsis thaliana</i> spermine synthase gene promoter. <i>Plant Biotechnology</i> , 2011, 28, 407-411.	1.0	7
84	Unraveling the roles of sphingolipids in plant innate immunity. <i>Plant Signaling and Behavior</i> , 2009, 4, 536-538.	2.4	6
85	Galactinol is involved in sequence-conserved upstream open reading frame-mediated repression of <i>Arabidopsis</i> HsfB1 translation. <i>Environmental and Experimental Botany</i> , 2018, 156, 120-129.	4.2	5
86	Promoter analysis of tbzF, a gene encoding a bZIP-type transcription factor, reveals distinct variation in cis-regions responsible for transcriptional activation between senescing leaves and flower buds in tobacco plants. <i>Plant Science</i> , 2002, 162, 973-980.	3.6	4
87	Abiotic Stress Phenotyping of Polyamine Mutants. <i>Methods in Molecular Biology</i> , 2018, 1694, 389-403.	0.9	3
88	Effect of thermospermine on expression profiling of different gene using massive analysis of cDNA ends (MACE) and vascular maintenance in <i>Arabidopsis</i> . <i>Physiology and Molecular Biology of Plants</i> , 2021, 27, 577-586.	3.1	3
89	Polyamine Homeostasis in Plants: The Role(s) of Evolutionarily Conserved Upstream ORFs. , 2015, , 111-118.		0