Jae-Yean Kim

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2960208/publications.pdf

Version: 2024-02-01

101 papers	7,354 citations	50276 46 h-index	56724 83 g-index
109 all docs	109 docs citations	109 times ranked	8447 citing authors

#	Article	IF	Citations
1	The genome of the cucumber, Cucumis sativus L.. Nature Genetics, 2009, 41, 1275-1281.	21.4	1,317
2	Callose Biosynthesis Regulates Symplastic Trafficking during Root Development. Developmental Cell, 2011, 21, 1144-1155.	7.0	394
3	Callose synthesis in higher plants. Plant Signaling and Behavior, 2009, 4, 489-492.	2.4	355
4	Plasmodesmata â€“ bridging the gap between neighboring plant cells. Trends in Cell Biology, 2009, 19, 495-503.	7.9	235
5	Developmental regulation and significance of KNOX protein trafficking in Arabidopsis. Development (Cambridge), 2003, 130, 4351-4362.	2.5	196
6	Combinatorial expression of bacterial whole mevalonate pathway for the production of Î²-carotene in E. coli. Journal of Biotechnology, 2009, 140, 218-226.	3.8	194
7	Metabolic engineering of Escherichia coli for Î±-farnesene production. Metabolic Engineering, 2011, 13, 648-655.	7.0	191
8	A Maize Vacuolar Invertase, IVR2, Is Induced by Water Stress. Organ/Tissue Specificity and Diurnal Modulation of Expression. Plant Physiology, 2000, 124, 71-84.	4.8	190
9	An update on microbial carotenoid production: application of recent metabolic engineering tools. Applied Microbiology and Biotechnology, 2007, 77, 505-512.	3.6	180
10	A novel cell-to-cell trafficking assay indicates that the KNOX homeodomain is necessary and sufficient for intercellular protein and mRNA trafficking. Genes and Development, 2005, 19, 788-793.	5.9	155
11	Auxin-Callose-Mediated Plasmodesmal Gating Is Essential for Tropic Auxin Gradient Formation and Signaling. Developmental Cell, 2014, 28, 132-146.	7.0	155
12	Light-regulated translation mediates gated induction of the Arabidopsis clock protein LHY. EMBO Journal, 2003, 22, 935-944.	7.8	153
13	Enhanced lycopene production inEscherichia coli engineered to synthesize isopentenyl diphosphate and dimethylallyl diphosphate from mevalonate. Biotechnology and Bioengineering, 2006, 94, 1025-1032.	3.3	144
14	Phosphorylation of the transcriptional repressor MYB15 by mitogen-activated protein kinase 6 is required for freezing tolerance in Arabidopsis. Nucleic Acids Research, 2017, 45, 6613-6627.	14.5	137
15	Highly efficient homologyâ€directed repair using CRISPR/Cpf1â€geminiviral replicon in tomato. Plant Biotechnology Journal, 2020, 18, 2133-2143.	8.3	134
16	The Arabidopsis Callose Synthase Gene GSL8 Is Required for Cytokinesis and Cell Patterning Â Â. Plant Physiology, 2009, 150, 105-113.	4.8	132
17	Farnesol production from Escherichia coli by harnessing the exogenous mevalonate pathway. Biotechnology and Bioengineering, 2010, 107, 421-429.	3.3	101
18	Engineering the lycopene synthetic pathway in E. coli by comparison of the carotenoid genes of Pantoea agglomerans and Pantoea ananatis. Applied Microbiology and Biotechnology, 2007, 74, 131-139.	3.6	98

#	Article	IF	Citations
19	The rice pathogen-related protein 10 (JIOsPR10) is induced by abiotic and biotic stresses and exhibits ribonuclease activity. Plant Cell Reports, 2008, 27, 593-603.	5.6	96
20	Plant volatiles as method of communication. Plant Biotechnology Reports, 2013, 7, 9-26.	1.5	91
21	Arabidopsis thaliana RECEPTOR DEAD KINASE1 Functions as a Positive Regulator in Plant Responses to ABA. Molecular Plant, 2017, 10, 223-243.	8.3	91
22	Callose balancing at plasmodesmata. Journal of Experimental Botany, 2018, 69, 5325-5339.	4.8	91
23	CRISPR/Cas9-based precise excision of SlHyPRP1 domain(s) to obtain salt stress-tolerant tomato. Plant Cell Reports, 2021, 40, 999-1011.	5.6	89
24	Exploration of Plant-Microbe Interactions for Sustainable Agriculture in CRISPR Era. Microorganisms, 2019, 7, 269.	3.6	87
25	Increased Î²-Carotene Production in Recombinant Escherichia coli Harboring an Engineered Isoprenoid Precursor Pathway with Mevalonate Addition. Biotechnology Progress, 2007, 23, 599-605.	2.6	82
26	Transcription factor-mediated cell-to-cell signalling in plants. Journal of Experimental Botany, 2014, 65, 1737-1749.	4.8	82
27	Salinity Stress in Potato: Understanding Physiological, Biochemical and Molecular Responses. Life, 2021, 11, 545.	2.4	81
28	Nâ€glycan maturation is crucial for cytokininâ€mediated development and cellulose synthesis in <scp>O</scp>ryza sativa. Plant Journal, 2013, 73, 966-979.	5.7	80
29	MYB transcription factors in the Arabidopsis circadian clock. Journal of Experimental Botany, 2002, 53, 1551-1557.	4.8	77
30	Characterization of two members of the maize gene family, Incw3 and Incw4, encoding cell-wall invertases. Gene, 2000, 245, 89-102.	2.2	76
31	Regulation of short-distance transport of RNA and protein. Current Opinion in Plant Biology, 2005, 8, 45-52.	7.1	73
32	CRISPR-Mediated Engineering across the Central Dogma in Plant Biology for Basic Research and Crop Improvement. Molecular Plant, 2021, 14, 127-150.	8.3	71
33	CRISPR/Cas9-Mediated Generation of Pathogen-Resistant Tomato against Tomato Yellow Leaf Curl Virus and Powdery Mildew. International Journal of Molecular Sciences, 2021, 22, 1878.	4.1	70
34	Ivr2, a candidate gene for a QTL of vacuolar invertase activity in maize leaves. Gene-specific expression under water stress. Plant Molecular Biology, 1999, 39, 373-380.	3.9	68
35	Directing vanillin production from ferulic acid by increased acetylâ€CoA consumption in recombinant Escherichia coli. Biotechnology and Bioengineering, 2009, 102, 200-208.	3.3	68
36	De novo transcriptome sequencing of Momordica cochinchinensis to identify genes involved in the carotenoid biosynthesis. Plant Molecular Biology, 2012, 79, 413-427.	3.9	66

#	Article	IF	Citations
37	Proteomic analysis of the secretome of rice calli. Physiologia Plantarum, 2009, 135, 331-341.	5.2	60
38	De-novo RNA Sequencing and Metabolite Profiling to Identify Genes Involved in Anthocyanin Biosynthesis in Korean Black Raspberry (Rubus coreanus Miquel). PLoS ONE, 2014, 9, e88292.	2.5	56
39	Proteomics Analysis of Rice Lesion Mimic Mutant (spl1) Reveals Tightly Localized Probenazole-Induced Protein (PBZ1) in Cells Undergoing Programmed Cell Death. Journal of Proteome Research, 2008, 7, 1750-1760.	3.7	55
40	Abnormal Chloroplast Development and Growth Inhibition in Rice ThioredoxinmKnock-Down Plants Â Â. Plant Physiology, 2008, 148, 808-817.	4.8	55
41	Analysis of Arabidopsis Transcription Factor Families Revealed Extensive Capacity for Cell-to-Cell Movement as Well as Discrete Trafficking Patterns. Molecules and Cells, 2011, 32, 519-526.	2.6	54
42	Arabidopsis glucan synthase-like 10 functions in male gametogenesis. Journal of Plant Physiology, 2009, 166, 344-352.	3.5	53
43	Challenges and Perspectives in Homology-Directed Gene Targeting in Monocot Plants. Rice, 2019, 12, 95.	4.0	53
44	Plasmodesmal receptor-like kinases identified through analysis of rice cell wall extracted proteins. Protoplasma, 2011, 248, 191-203.	2.1	52
45	Cell-to-cell trafficking of RNA and RNA silencing through plasmodesmata. Protoplasma, 2011, 248, 101-116.	2.1	51
46	Proteomics of weakly bound cell wall proteins in rice calli. Journal of Plant Physiology, 2009, 166, 675-685.	3.5	49
47	Isolation, Characterization and Expression Analyses of Two Cell Wall Invertase Genes in Maize. Journal of Plant Physiology, 1999, 155, 197-204.	3.5	48
48	Evolution of plant mutagenesis tools: a shifting paradigm from random to targeted genome editing. Plant Biotechnology Reports, 2019, 13, 423-445.	1.5	43
49	Evolutionary and molecular analysis of <scp>D</scp>of transcription factors identified a conserved motif for intercellular protein trafficking. New Phytologist, 2013, 198, 1250-1260.	7.3	40
50	Cloning of two splice variants of the rice PTS1 receptor,OsPex5pL andOsPex5pS, and their functional characterization usingpex5-deficient yeast and Arabidopsis. Plant Journal, 2006, 47, 457-466.	5.7	39
51	Evolutionarily Conserved Regulatory Motifs in the Promoter of the Arabidopsis Clock Gene LATE ELONGATED HYPOCOTYL Â Â. Plant Cell, 2009, 21, 2606-2623.	6.6	34
52	Integrating Hormone- and Micromolecule-Mediated Signaling with Plasmodesmal Communication. Molecular Plant, 2016, 9, 46-56.	8.3	34
53	Transport of macromolecules through plasmodesmata and the phloem. Physiologia Plantarum, 2006, 126, 560-571.	5.2	31
54	Comprehensive proteome analysis of lettuce latex using multidimensional protein-identification technology. Phytochemistry, 2009, 70, 570-578.	2.9	31

#	Article	IF	Citations
55	AtPR5K2, a PR5-Like Receptor Kinase, Modulates Plant Responses to Drought Stress by Phosphorylating Protein Phosphatase 2Cs. Frontiers in Plant Science, 2019, 10, 1146.	3.6	31
56	Engineered heterologous FPP synthases-mediated Z,E-FPP synthesis in E. coli. Metabolic Engineering, 2013, 18, 53-59.	7.0	29
57	Cell-to-cell movement of viruses via plasmodesmata. Journal of Plant Research, 2015, 128, 37-47.	2.4	29
58	Lipid Raft, Regulator of Plasmodesmal Callose Homeostasis. Plants, 2017, 6, 15.	3.5	27
59	CRISPR/Casâ€based precision genome editing via microhomologyâ€mediated end joining. Plant Biotechnology Journal, 2021, 19, 230-239.	8.3	25
60	Identification of natural hybrids in Korean Phragmites using haplotype and genotype analyses. Plant Systematics and Evolution, 2011, 293, 247-253.	0.9	22
61	Proteome study of the phloem sap of pumpkin using multidimensional protein identification technology. Journal of Plant Physiology, 2010, 167, 771-778.	3.5	21
62	Intercellular and systemic spread of RNA and RNAi in plants. Wiley Interdisciplinary Reviews RNA, 2013, 4, 279-293.	6.4	21
63	Genetic introduction of foreign genes to Pleurotus eryngii by restriction enzyme-mediated integration. Journal of Microbiology, 2010, 48, 253-256.	2.8	19
64	The Role of Plasmodesmata-Associated Receptor in Plant Development and Environmental Response. Plants, 2020, 9, 216.	3.5	19
65	RNA-seq analysis of Rubus idaeus cv. Nova: transcriptome sequencing and de novo assembly for subsequent functional genomics approaches. Plant Cell Reports, 2014, 33, 1617-1628.	5.6	18
66	New era of precision plant breeding using genome editing. Plant Biotechnology Reports, 2019, 13, 419-421.	1.5	18
67	Sphingolipids Modulate Secretion of Glycosylphosphatidylinositol-Anchored Plasmodesmata Proteins and Callose Deposition. Plant Physiology, 2020, 184, 407-420.	4.8	18
68	Players at plasmodesmal nano-channels. Journal of Plant Biology, 2015, 58, 75-86.	2.1	17
69	Precision Genome Engineering for the Breeding of Tomatoes: Recent Progress and Future Perspectives. Frontiers in Genome Editing, 2020, 2, 612137.	5.2	17
70	In Vivo Rapid Investigation of CRISPR-Based Base Editing Components in Escherichia coli (IRI-CCE): A Platform for Evaluating Base Editing Tools and Their Components. International Journal of Molecular Sciences, 2022, 23, 1145.	4.1	17
71	Genome editing and beyond: what does it mean for the future of plant breeding?. Planta, 2022, 255, 130.	3.2	17
72	A non-cell-autonomous mechanism for the control of plant architecture and epidermal differentiation involves intercellular trafficking of BREVIPEDICELLUS protein. Functional Plant Biology, 2009, 36, 280.	2.1	16

#	Article	IF	Citations
73	Characterization of orchardgrass p23, a flowering plant Hsp90 cohort protein. Cell Stress and Chaperones, 2009, 14, 233-243.	2.9	15
74	Fluorescence imaging for Fe³⁺ in Arabidopsis by using simple naphthalene-based ligands. RSC Advances, 2016, 6, 53912-53918.	3.6	15
75	A Gain-of-Function Mutant of IAA15 Inhibits Lateral Root Development by Transcriptional Repression of LBD Genes in Arabidopsis. Frontiers in Plant Science, 2020, 11, 1239.	3.6	15
76	Proteomic Analysis to Identify Tightly-Bound Cell Wall Protein in Rice Calli. Molecules and Cells, 2015, 38, 685-696.	2.6	15
77	Revisiting Apoplastic Auxin Signaling Mediated by AUXIN BINDING PROTEIN 1. Molecules and Cells, 2015, 38, 829-835.	2.6	14
78	RecA-mediated SOS response provides a geraniol tolerance in Escherichia coli. Journal of Biotechnology, 2013, 167, 357-364.	3.8	13
79	Improvement of the LbCas12a-crRNA System for Efficient Gene Targeting in Tomato. Frontiers in Plant Science, 2021, 12, 722552.	3.6	13
80	Pathogen effectors: What do they do at plasmodesmata?. Molecular Plant Pathology, 2022, 23, 795-804.	4.2	12
81	Identification of evolutionarily conserved amino acid residues in homeodomain of KNOX proteins for intercellular trafficking. Plant Signaling and Behavior, 2014, 9, e28355.	2.4	11
82	High selective fluorescence imaging of cesium distribution in Arabidopsis using a bis(trihydroxyphenyl)-appended fluorescent probe with a turn-on system. RSC Advances, 2015, 5, 26662-26665.	3.6	11
83	Proteomic identification of an embryo-specific 1Cys-Prx promoter and analysis of its activity in transgenic rice. Biochemical and Biophysical Research Communications, 2011, 408, 78-83.	2.1	10
84	Intercellular Signaling: An Elusive Player Steps Forth. Current Biology, 2003, 13, R349-R350.	3.9	9
85	Singleâ€strand annealing: Molecular mechanisms and potential applications in CRISPRâ€Casâ€based precision genome editing. Biotechnology Journal, 2022, 17, e2100413.	3.5	9
86	Extended latex proteome analysis deciphers additional roles of the lettuce laticifer. Plant Biotechnology Reports, 2010, 4, 311-319.	1.5	8
87	Computational Simulations Identify Pyrrolidine-2,3-Dione Derivatives as Novel Inhibitors of Cdk5/p25 Complex to Attenuate Alzheimerâ€™s Pathology. Journal of Clinical Medicine, 2019, 8, 746.	2.4	8
88	The protein kinase TOUSLED facilitates RNAi inArabidopsis. Nucleic Acids Research, 2014, 42, 7971-7980.	14.5	7
89	Signaling network for stem cell maintenance and functioning inarabidopsis shoot apical meristem. Journal of Plant Biology, 2007, 50, 274-281.	2.1	6
90	Symplasmic Intercellular Communication through Plasmodesmata. Plants, 2018, 7, 23.	3.5	6

#	Article	IF	Citations
91	Conserved Opposite Functions in Plant Resistance to Biotrophic and Necrotrophic Pathogens of the Immune Regulator SRFR1. International Journal of Molecular Sciences, 2021, 22, 6427.	4.1	6
92	Metabolic Module Mining Based on Independent Component Analysis in Arabidopsis thaliana. Molecules and Cells, 2012, 34, 295-304.	2.6	5
93	Genome Editing for Plasmodesmal Biology. Frontiers in Plant Science, 2021, 12, 679140.	3.6	4
94	Integrated analyses of the rice secretome. Plant Signaling and Behavior, 2009, 4, 345-347.	2.4	3
95	A Strategy to Validate the Role of Callose-mediated Plasmodesmal Gating in the Tropic Response. Journal of Visualized Experiments, 2016, , .	0.3	3
96	Application of cereal and vegetable endophytes in plant health management. , 2021, , 29-51.		3
97	Plasmodesmata and Phloem-Based Trafficking of Macromolecules. , 2013, , 183-216.		0
98	GAL4 Transactivation-Based Assay for the Detection of Selective Intercellular Protein Movement. Methods in Molecular Biology, 2015, 1217, 231-243.	0.9	0
99	Intercellular Trafficking of Homeodomain Proteins. Plant Pathology Journal, 2005, 21, 21-26.	1.7	0
100	Regulation of Intercellular Protein and RNA Movement. Journal of Plant Biotechnology, 2007, 34, 129-137.	0.4	0
101	Genetic Diversity of Common Reed in Korea Based on Morphological Characteristics and Random Amplified Polymorphic DNA Markers. Korean Journal of Plant Resources, 2011, 24, 666-674.	0.2	0