

# Jae-Yean Kim

## List of Publications by Year in descending order

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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	Pathogen effectors: What do they do at plasmodesmata?. <i>Molecular Plant Pathology</i> , 2022, 23, 795-804.	4.2	12
2	Single-strand annealing: Molecular mechanisms and potential applications in CRISPR-Cas-based precision genome editing. <i>Biotechnology Journal</i> , 2022, 17, e2100413.	3.5	9
3	In Vivo Rapid Investigation of CRISPR-Based Base Editing Components in <i>Escherichia coli</i> (IRI-CCE): A Platform for Evaluating Base Editing Tools and Their Components. <i>International Journal of Molecular Sciences</i> , 2022, 23, 1145.	4.1	17
4	Genome editing and beyond: what does it mean for the future of plant breeding?. <i>Planta</i> , 2022, 255, 130.	3.2	17
5	CRISPR/Cas9-based precise excision of SlHyPRP1 domain(s) to obtain salt stress-tolerant tomato. <i>Plant Cell Reports</i> , 2021, 40, 999-1011.	5.6	89
6	CRISPR/Cas-based precision genome editing via microhomology-mediated end joining. <i>Plant Biotechnology Journal</i> , 2021, 19, 230-239.	8.3	25
7	CRISPR-Mediated Engineering across the Central Dogma in Plant Biology for Basic Research and Crop Improvement. <i>Molecular Plant</i> , 2021, 14, 127-150.	8.3	71
8	Application of cereal and vegetable endophytes in plant health management. , 2021, , 29-51.		3
9	CRISPR/Cas9-Mediated Generation of Pathogen-Resistant Tomato against Tomato Yellow Leaf Curl Virus and Powdery Mildew. <i>International Journal of Molecular Sciences</i> , 2021, 22, 1878.	4.1	70
10	Conserved Opposite Functions in Plant Resistance to Biotrophic and Necrotrophic Pathogens of the Immune Regulator SRRF1. <i>International Journal of Molecular Sciences</i> , 2021, 22, 6427.	4.1	6
11	Genome Editing for Plasmodesmal Biology. <i>Frontiers in Plant Science</i> , 2021, 12, 679140.	3.6	4
12	Salinity Stress in Potato: Understanding Physiological, Biochemical and Molecular Responses. <i>Life</i> , 2021, 11, 545.	2.4	81
13	Improvement of the LbCas12a-crRNA System for Efficient Gene Targeting in Tomato. <i>Frontiers in Plant Science</i> , 2021, 12, 722552.	3.6	13
14	A Gain-of-Function Mutant of IAA15 Inhibits Lateral Root Development by Transcriptional Repression of LBD Genes in Arabidopsis. <i>Frontiers in Plant Science</i> , 2020, 11, 1239.	3.6	15
15	Highly efficient homology-directed repair using CRISPR/Cpf1-geminiviral replicon in tomato. <i>Plant Biotechnology Journal</i> , 2020, 18, 2133-2143.	8.3	134
16	Sphingolipids Modulate Secretion of Glycosylphosphatidylinositol-Anchored Plasmodesmata Proteins and Callose Deposition. <i>Plant Physiology</i> , 2020, 184, 407-420.	4.8	18
17	Precision Genome Engineering for the Breeding of Tomatoes: Recent Progress and Future Perspectives. <i>Frontiers in Genome Editing</i> , 2020, 2, 612137.	5.2	17
18	The Role of Plasmodesmata-Associated Receptor in Plant Development and Environmental Response. <i>Plants</i> , 2020, 9, 216.	3.5	19

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19	Exploration of Plant-Microbe Interactions for Sustainable Agriculture in CRISPR Era. <i>Microorganisms</i> , 2019, 7, 269.	3.6	87
20	AtPR5K2, a PR5-Like Receptor Kinase, Modulates Plant Responses to Drought Stress by Phosphorylating Protein Phosphatase 2Cs. <i>Frontiers in Plant Science</i> , 2019, 10, 1146.	3.6	31
21	New era of precision plant breeding using genome editing. <i>Plant Biotechnology Reports</i> , 2019, 13, 419-421.	1.5	18
22	Evolution of plant mutagenesis tools: a shifting paradigm from random to targeted genome editing. <i>Plant Biotechnology Reports</i> , 2019, 13, 423-445.	1.5	43
23	Computational Simulations Identify Pyrrolidine-2,3-Dione Derivatives as Novel Inhibitors of Cdk5/p25 Complex to Attenuate Alzheimer's Pathology. <i>Journal of Clinical Medicine</i> , 2019, 8, 746.	2.4	8
24	Challenges and Perspectives in Homology-Directed Gene Targeting in Monocot Plants. <i>Rice</i> , 2019, 12, 95.	4.0	53
25	Callose balancing at plasmodesmata. <i>Journal of Experimental Botany</i> , 2018, 69, 5325-5339.	4.8	91
26	Symplasmic Intercellular Communication through Plasmodesmata. <i>Plants</i> , 2018, 7, 23.	3.5	6
27	Arabidopsis thaliana RECEPTOR DEAD KINASE1 Functions as a Positive Regulator in Plant Responses to ABA. <i>Molecular Plant</i> , 2017, 10, 223-243.	8.3	91
28	Phosphorylation of the transcriptional repressor MYB15 by mitogen-activated protein kinase 6 is required for freezing tolerance in Arabidopsis. <i>Nucleic Acids Research</i> , 2017, 45, 6613-6627.	14.5	137
29	Lipid Raft, Regulator of Plasmodesmal Callose Homeostasis. <i>Plants</i> , 2017, 6, 15.	3.5	27
30	A Strategy to Validate the Role of Callose-mediated Plasmodesmal Gating in the Tropic Response. <i>Journal of Visualized Experiments</i> , 2016, , .	0.3	3
31	Fluorescence imaging for Fe <sup>3+</sup> in Arabidopsis by using simple naphthalene-based ligands. <i>RSC Advances</i> , 2016, 6, 53912-53918.	3.6	15
32	Integrating Hormone- and Micromolecule-Mediated Signaling with Plasmodesmal Communication. <i>Molecular Plant</i> , 2016, 9, 46-56.	8.3	34
33	Players at plasmodesmal nano-channels. <i>Journal of Plant Biology</i> , 2015, 58, 75-86.	2.1	17
34	High selective fluorescence imaging of cesium distribution in Arabidopsis using a bis(trihydroxyphenyl)-appended fluorescent probe with a turn-on system. <i>RSC Advances</i> , 2015, 5, 26662-26665.	3.6	11
35	Cell-to-cell movement of viruses via plasmodesmata. <i>Journal of Plant Research</i> , 2015, 128, 37-47.	2.4	29
36	GAL4 Transactivation-Based Assay for the Detection of Selective Intercellular Protein Movement. <i>Methods in Molecular Biology</i> , 2015, 1217, 231-243.	0.9	0

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37	Proteomic Analysis to Identify Tightly-Bound Cell Wall Protein in Rice Calli. <i>Molecules and Cells</i> , 2015, 38, 685-696.	2.6	15
38	Revisiting Apoplastic Auxin Signaling Mediated by AUXIN BINDING PROTEIN 1. <i>Molecules and Cells</i> , 2015, 38, 829-835.	2.6	14
39	De-novo RNA Sequencing and Metabolite Profiling to Identify Genes Involved in Anthocyanin Biosynthesis in Korean Black Raspberry ( <i>Rubus coreanus</i> Miquel). <i>PLoS ONE</i> , 2014, 9, e88292.	2.5	56
40	Identification of evolutionarily conserved amino acid residues in homeodomain of KNOX proteins for intercellular trafficking. <i>Plant Signaling and Behavior</i> , 2014, 9, e28355.	2.4	11
41	The protein kinase TOUSLED facilitates RNAi in <i>Arabidopsis</i> . <i>Nucleic Acids Research</i> , 2014, 42, 7971-7980.	14.5	7
42	Auxin-Callose-Mediated Plasmodesmal Gating Is Essential for Tropic Auxin Gradient Formation and Signaling. <i>Developmental Cell</i> , 2014, 28, 132-146.	7.0	155
43	Transcription factor-mediated cell-to-cell signalling in plants. <i>Journal of Experimental Botany</i> , 2014, 65, 1737-1749.	4.8	82
44	RNA-seq analysis of <i>Rubus idaeus</i> cv. Nova: transcriptome sequencing and de novo assembly for subsequent functional genomics approaches. <i>Plant Cell Reports</i> , 2014, 33, 1617-1628.	5.6	18
45	RecA-mediated SOS response provides a geraniol tolerance in <i>Escherichia coli</i> . <i>Journal of Biotechnology</i> , 2013, 167, 357-364.	3.8	13
46	Plasmodesmata and Phloem-Based Trafficking of Macromolecules. , 2013, , 183-216.		0
47	Plant volatiles as method of communication. <i>Plant Biotechnology Reports</i> , 2013, 7, 9-26.	1.5	91
48	N-glycan maturation is crucial for cytokinin-mediated development and cellulose synthesis in <i>Oryza sativa</i> . <i>Plant Journal</i> , 2013, 73, 966-979.	5.7	80
49	Intercellular and systemic spread of RNA and RNAi in plants. <i>Wiley Interdisciplinary Reviews RNA</i> , 2013, 4, 279-293.	6.4	21
50	Evolutionary and molecular analysis of D of transcription factors identified a conserved motif for intercellular protein trafficking. <i>New Phytologist</i> , 2013, 198, 1250-1260.	7.3	40
51	Engineered heterologous FPP synthases-mediated Z,E-FPP synthesis in <i>E. coli</i> . <i>Metabolic Engineering</i> , 2013, 18, 53-59.	7.0	29
52	Metabolic Module Mining Based on Independent Component Analysis in <i>Arabidopsis thaliana</i> . <i>Molecules and Cells</i> , 2012, 34, 295-304.	2.6	5
53	De novo transcriptome sequencing of <i>Momordica cochinchinensis</i> to identify genes involved in the carotenoid biosynthesis. <i>Plant Molecular Biology</i> , 2012, 79, 413-427.	3.9	66
54	Callose Biosynthesis Regulates Symplastic Trafficking during Root Development. <i>Developmental Cell</i> , 2011, 21, 1144-1155.	7.0	394

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55	Proteomic identification of an embryo-specific 1Cys-Prx promoter and analysis of its activity in transgenic rice. <i>Biochemical and Biophysical Research Communications</i> , 2011, 408, 78-83.	2.1	10
56	Metabolic engineering of <i>Escherichia coli</i> for $\pm$ -farnesene production. <i>Metabolic Engineering</i> , 2011, 13, 648-655.	7.0	191
57	Analysis of Arabidopsis Transcription Factor Families Revealed Extensive Capacity for Cell-to-Cell Movement as Well as Discrete Trafficking Patterns. <i>Molecules and Cells</i> , 2011, 32, 519-526.	2.6	54
58	Identification of natural hybrids in Korean Phragmites using haplotype and genotype analyses. <i>Plant Systematics and Evolution</i> , 2011, 293, 247-253.	0.9	22
59	Cell-to-cell trafficking of RNA and RNA silencing through plasmodesmata. <i>Protoplasma</i> , 2011, 248, 101-116.	2.1	51
60	Plasmodesmal receptor-like kinases identified through analysis of rice cell wall extracted proteins. <i>Protoplasma</i> , 2011, 248, 191-203.	2.1	52
61	Genetic Diversity of Common Reed in Korea Based on Morphological Characteristics and Random Amplified Polymorphic DNA Markers. <i>Korean Journal of Plant Resources</i> , 2011, 24, 666-674.	0.2	0
62	Genetic introduction of foreign genes to <i>Pleurotus eryngii</i> by restriction enzyme-mediated integration. <i>Journal of Microbiology</i> , 2010, 48, 253-256.	2.8	19
63	Extended latex proteome analysis deciphers additional roles of the lettuce laticifer. <i>Plant Biotechnology Reports</i> , 2010, 4, 311-319.	1.5	8
64	Farnesol production from <i>Escherichia coli</i> by harnessing the exogenous mevalonate pathway. <i>Biotechnology and Bioengineering</i> , 2010, 107, 421-429.	3.3	101
65	Proteome study of the phloem sap of pumpkin using multidimensional protein identification technology. <i>Journal of Plant Physiology</i> , 2010, 167, 771-778.	3.5	21
66	The Arabidopsis Callose Synthase Gene <i>GSL8</i> Is Required for Cytokinesis and Cell Patterning. <i>Plant Physiology</i> , 2009, 150, 105-113.	4.8	132
67	Integrated analyses of the rice secretome. <i>Plant Signaling and Behavior</i> , 2009, 4, 345-347.	2.4	3
68	Callose synthesis in higher plants. <i>Plant Signaling and Behavior</i> , 2009, 4, 489-492.	2.4	355
69	Plasmodesmata " bridging the gap between neighboring plant cells. <i>Trends in Cell Biology</i> , 2009, 19, 495-503.	7.9	235
70	Directing vanillin production from ferulic acid by increased acetyl-CoA consumption in recombinant <i>Escherichia coli</i> . <i>Biotechnology and Bioengineering</i> , 2009, 102, 200-208.	3.3	68
71	Comprehensive proteome analysis of lettuce latex using multidimensional protein-identification technology. <i>Phytochemistry</i> , 2009, 70, 570-578.	2.9	31
72	Characterization of orchardgrass p23, a flowering plant Hsp90 cohort protein. <i>Cell Stress and Chaperones</i> , 2009, 14, 233-243.	2.9	15

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73	Proteomic analysis of the secretome of rice calli. <i>Physiologia Plantarum</i> , 2009, 135, 331-341.	5.2	60
74	The genome of the cucumber, <i>Cucumis sativus</i> L.. <i>Nature Genetics</i> , 2009, 41, 1275-1281.	21.4	1,317
75	Combinatorial expression of bacterial whole mevalonate pathway for the production of $\beta^2$ -carotene in <i>E. coli</i> . <i>Journal of Biotechnology</i> , 2009, 140, 218-226.	3.8	194
76	<i>Arabidopsis</i> glucan synthase-like 10 functions in male gametogenesis. <i>Journal of Plant Physiology</i> , 2009, 166, 344-352.	3.5	53
77	Proteomics of weakly bound cell wall proteins in rice calli. <i>Journal of Plant Physiology</i> , 2009, 166, 675-685.	3.5	49
78	A non-cell-autonomous mechanism for the control of plant architecture and epidermal differentiation involves intercellular trafficking of BREVIPEDICELLUS protein. <i>Functional Plant Biology</i> , 2009, 36, 280.	2.1	16
79	Evolutionarily Conserved Regulatory Motifs in the Promoter of the <i>Arabidopsis</i> Clock Gene LATE ELONGATED HYPOCOTYL 4. <i>Plant Cell</i> , 2009, 21, 2606-2623.	6.6	34
80	The rice pathogen-related protein 10 (JIOsPR10) is induced by abiotic and biotic stresses and exhibits ribonuclease activity. <i>Plant Cell Reports</i> , 2008, 27, 593-603.	5.6	96
81	Proteomics Analysis of Rice Lesion Mimic Mutant ( <i>lsm1</i> ) Reveals Tightly Localized Probenazole-Induced Protein (PBZ1) in Cells Undergoing Programmed Cell Death. <i>Journal of Proteome Research</i> , 2008, 7, 1750-1760.	3.7	55
82	Abnormal Chloroplast Development and Growth Inhibition in Rice Thioredoxin <i>m</i> Knock-Down Plants. <i>Plant Physiology</i> , 2008, 148, 808-817.	4.8	55
83	Signaling network for stem cell maintenance and functioning in <i>Arabidopsis</i> shoot apical meristem. <i>Journal of Plant Biology</i> , 2007, 50, 274-281.	2.1	6
84	Engineering the lycopene synthetic pathway in <i>E. coli</i> by comparison of the carotenoid genes of <i>Pantoea agglomerans</i> and <i>Pantoea ananatis</i> . <i>Applied Microbiology and Biotechnology</i> , 2007, 74, 131-139.	3.6	98
85	An update on microbial carotenoid production: application of recent metabolic engineering tools. <i>Applied Microbiology and Biotechnology</i> , 2007, 77, 505-512.	3.6	180
86	Increased $\beta^2$ -Carotene Production in Recombinant <i>Escherichia coli</i> Harboring an Engineered Isoprenoid Precursor Pathway with Mevalonate Addition. <i>Biotechnology Progress</i> , 2007, 23, 599-605.	2.6	82
87	Regulation of Intercellular Protein and RNA Movement. <i>Journal of Plant Biotechnology</i> , 2007, 34, 129-137.	0.4	0
88	Transport of macromolecules through plasmodesmata and the phloem. <i>Physiologia Plantarum</i> , 2006, 126, 560-571.	5.2	31
89	Cloning of two splice variants of the rice PTS1 receptor, OsPex5pL and OsPex5pS, and their functional characterization using pex5-deficient yeast and <i>Arabidopsis</i> . <i>Plant Journal</i> , 2006, 47, 457-466.	5.7	39
90	Enhanced lycopene production in <i>Escherichia coli</i> engineered to synthesize isopentenyl diphosphate and dimethylallyl diphosphate from mevalonate. <i>Biotechnology and Bioengineering</i> , 2006, 94, 1025-1032.	3.3	144

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91	Regulation of short-distance transport of RNA and protein. <i>Current Opinion in Plant Biology</i> , 2005, 8, 45-52.	7.1	73
92	A novel cell-to-cell trafficking assay indicates that the KNOX homeodomain is necessary and sufficient for intercellular protein and mRNA trafficking. <i>Genes and Development</i> , 2005, 19, 788-793.	5.9	155
93	Intercellular Trafficking of Homeodomain Proteins. <i>Plant Pathology Journal</i> , 2005, 21, 21-26.	1.7	0
94	Light-regulated translation mediates gated induction of the Arabidopsis clock protein LHY. <i>EMBO Journal</i> , 2003, 22, 935-944.	7.8	153
95	Intercellular Signaling: An Elusive Player Steps Forth. <i>Current Biology</i> , 2003, 13, R349-R350.	3.9	9
96	Developmental regulation and significance of KNOX protein trafficking in Arabidopsis. <i>Development (Cambridge)</i> , 2003, 130, 4351-4362.	2.5	196
97	MYB transcription factors in the Arabidopsis circadian clock. <i>Journal of Experimental Botany</i> , 2002, 53, 1551-1557.	4.8	77
98	A Maize Vacuolar Invertase, IVR2, Is Induced by Water Stress. Organ/Tissue Specificity and Diurnal Modulation of Expression. <i>Plant Physiology</i> , 2000, 124, 71-84.	4.8	190
99	Characterization of two members of the maize gene family, Incw3 and Incw4, encoding cell-wall invertases. <i>Gene</i> , 2000, 245, 89-102.	2.2	76
100	Ivr2, a candidate gene for a QTL of vacuolar invertase activity in maize leaves. Gene-specific expression under water stress. <i>Plant Molecular Biology</i> , 1999, 39, 373-380.	3.9	68
101	Isolation, Characterization and Expression Analyses of Two Cell Wall Invertase Genes in Maize. <i>Journal of Plant Physiology</i> , 1999, 155, 197-204.	3.5	48