Hong Gil Nam

List of Publications by Year
in descending order

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129 papers	14,805 citations	22153 59 h-index	19190 118 g-index
132 all docs	132 docs citations	132 times ranked	13589 citing authors

#	Article	IF	Citations
1	Leaf Senescence. Annual Review of Plant Biology, 2007, 58, 115-136.	18.7	1,737
2	Comparative transcriptome analysis reveals significant differences in gene expression and signalling pathways between developmental and dark/starvation-induced senescence in Arabidopsis. Plant Journal, 2005, 42, 567-585.	5.7	924
3	Trifurcate Feed-Forward Regulation of Age-Dependent Cell Death Involving miR164 in Arabidopsis. Science, 2009, 323, 1053-1057.	12.6	652
4	Control of Circadian Rhythms and Photoperiodic Flowering by the Arabidopsis GIGANTEA Gene. Science, 1999, 285, 1579-1582.	12.6	565
5	ZEITLUPE is a circadian photoreceptor stabilized by GIGANTEA in blue light. Nature, 2007, 449, 356-360.	27.8	510
6	ORE9, an F-Box Protein That Regulates Leaf Senescence in Arabidopsis. Plant Cell, 2001, 13, 1779-1790.	6.6	452
7	Cytokinin-mediated control of leaf longevity by AHK3 through phosphorylation of ARR2 in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 814-819.	7.1	382
8	Leaf Senescence: Systems and Dynamics Aspects. Annual Review of Plant Biology, 2019, 70, 347-376.	18.7	339
9	Spontaneous generation of hydrogen peroxide from aqueous microdroplets. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19294-19298.	7.1	287
10	Molecular genetics of leaf senescence in Arabidopsis. Trends in Plant Science, 2003, 8, 272-278.	8.8	276
11	Plant leaf senescence and death â€“ regulation by multiple layers of control and implications for aging in general. Journal of Cell Science, 2013, 126, 4823-33.	2.0	263
12	OASIS: Online Application for the Survival Analysis of Lifespan Assays Performed in Aging Research. PLoS ONE, 2011, 6, e23525.	2.5	259
13	Auxin response factor 2 (ARF2) plays a major role in regulating auxin-mediated leaf longevity. Journal of Experimental Botany, 2010, 61, 1419-1430.	4.8	245
14	Gene regulatory cascade of senescence-associated NAC transcription factors activated by ETHYLENE-INSENSITIVE2-mediated leaf senescence signalling in Arabidopsis. Journal of Experimental Botany, 2014, 65, 4023-4036.	4.8	245
15	The molecular genetic analysis of leaf senescence. Current Opinion in Biotechnology, 1997, 8, 200-207.	6.6	233
16	OsMADS51 Is a Short-Day Flowering Promoter That Functions Upstream of Ehd1, OsMADS14, and Hd3a Â. Plant Physiology, 2007, 145, 1484-1494.	4.8	224
17	A senescence-associated gene of Arabidopsis thaliana is distinctively regulated during natural and artificially induced leaf senescence. Plant Molecular Biology, 1996, 30, 739-754.	3.9	214
18	Regulatory network of NAC transcription factors in leaf senescence. Current Opinion in Plant Biology, 2016, 33, 48-56.	7.1	210

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19	Micrometer-Sized Water Droplets Induce Spontaneous Reduction. Journal of the American Chemical Society, 2019, 141, 10585-10589.	13.7	205
20	Acceleration of reaction in charged microdroplets. Quarterly Reviews of Biophysics, 2015, 48, 437-444.	5.7	204
21	Age-Dependent Action of an ABA-Inducible Receptor Kinase, RPK1, as a Positive Regulator of Senescence in Arabidopsis Leaves. Plant and Cell Physiology, 2011, 52, 651-662.	3.1	198
22	Microdroplet fusion mass spectrometry for fast reaction kinetics. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3898-3903.	7.1	197
23	The Delayed Leaf Senescence Mutants of Arabidopsis, ore1, ore3, and ore9 are Tolerant to Oxidative Stress. Plant and Cell Physiology, 2004, 45, 923-932.	3.1	196
24	Differential expression of senescence-associated mRNAs during leaf senescence induced by different senescence-inducing factors in Arabidopsis. Plant Molecular Biology, 1998, 37, 445-454.	3.9	186
25	Control of plant germline proliferation by SCFFBL17 degradation of cell cycle inhibitors. Nature, 2008, 455, 1134-1137.	27.8	180
26	The Identity of Plant Glutamate Receptors. Science, 2001, 292, 1486b-1487.	12.6	175
27	Abiotic production of sugar phosphates and uridine ribonucleoside in aqueous microdroplets. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 12396-12400.	7.1	166
28	BLADE-ON-PETIOLE1 Encodes a BTB/POZ Domain Protein Required for Leaf Morphogenesis in Arabidopsis thaliana. Plant and Cell Physiology, 2004, 45, 1361-1370.	3.1	165
29	BLADE-ON-PETIOLE1 and 2 Control Arabidopsis Lateral Organ Fate through Regulation of LOB Domain and Adaxial-Abaxial Polarity Genes. Plant Cell, 2007, 19, 1809-1825.	6.6	162
30	ORE1 balances leaf senescence against maintenance by antagonizing G2â€likeâ€mediated transcription. EMBO Reports, 2013, 14, 382-388.	4.5	155
31	Quantitative Peptidomics Study Reveals That a Wound-Induced Peptide from PR-1 Regulates Immune Signaling in Tomato. Plant Cell, 2014, 26, 4135-4148.	6.6	155
32	TowardÂSystems Understanding of Leaf Senescence: An Integrated Multi-Omics Perspective on Leaf Senescence Research. Molecular Plant, 2016, 9, 813-825.	8.3	153
33	The RAV1 transcription factor positively regulates leaf senescence in Arabidopsis. Journal of Experimental Botany, 2010, 61, 3947-3957.	4.8	152
34	Phytochrome-Specific Type 5 Phosphatase Controls Light Signal Flux by Enhancing Phytochrome Stability and Affinity for a Signal Transducer. Cell, 2005, 120, 395-406.	28.9	148
35	Towards a critical understanding of the photosystem II repair mechanism and its regulation during stress conditions. FEBS Letters, 2013, 587, 3372-3381.	2.8	140
36	Two dominant photomorphogenic mutations of Arabidopsis thaliana identified as suppressor mutations of hy2. Plant Journal, 1996, 9, 441-456.	5.7	139

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37	Spontaneous formation of gold nanostructures in aqueous microdroplets. Nature Communications, 2018, 9, 1562.	12.8	124
38	Overexpression of a chromatin architectureâ€controlling ATâ€hook protein extends leaf longevity and increases the postâ€harvest storage life of plants. Plant Journal, 2007, 52, 1140-1153.	5.7	121
39	Programming of Plant Leaf Senescence with Temporal and Inter-Organellar Coordination of Transcriptome in Arabidopsis1 Â. Plant Physiology, 2016, 171, 452-467.	4.8	121
40	The Arabidopsis COG1 gene encodes a Dof domain transcription factor and negatively regulates phytochrome signaling. Plant Journal, 2003, 34, 161-171.	5.7	113
41	Stress memory in plants: a negative regulation of stomatal response and transient induction ofrd22gene to light in abscisic acid-entrainedArabidopsisplants. Plant Journal, 2003, 36, 240-255.	5.7	109
42	Time-evolving genetic networks reveal a NAC troika that negatively regulates leaf senescence in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E4930-E4939.	7.1	106
43	The short-lived African turquoise killifish: an emerging experimental model for ageing. DMM Disease Models and Mechanisms, 2016, 9, 115-129.	2.4	102
44	Circadian control of ORE1 by PRR9 positively regulates leaf senescence in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8448-8453.	7.1	99
45	Deâ€regulated expression of the plant glutamate receptor homolog AtGLR3.1 impairs longâ€term Ca²⁺â€programmed stomatal closure. Plant Journal, 2009, 58, 437-449.	5.7	98
46	Abiotic synthesis of purine and pyrimidine ribonucleosides in aqueous microdroplets. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 36-40.	7.1	98
47	Selective Fluorescent Detection of RNA in Living Cells by Using Imidazolium-Based Cyclophane. Journal of the American Chemical Society, 2013, 135, 90-93.	13.7	95
48	Stable genetic transformation of Arabidopsis thaliana by Agrobacterium inoculation in planta. Plant Journal, 1994, 5, 551-558.	5.7	94
49	Extended leaf longevity in the ore4-1 mutant of Arabidopsis with a reduced expression of a plastid ribosomal protein gene. Plant Journal, 2002, 31, 331-340.	5.7	85
50	Photomorphogenic development of the Arabidopsisshy2-1D mutation and its interaction with phytochromes in darkness. Plant Journal, 1998, 15, 61-68.	5.7	82
51	Young capillary vessels rejuvenate aged pancreatic islets. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17612-17617.	7.1	79
52	Concurrent activation of OsAMT1;2 and OsGOGAT1 in rice leads to enhanced nitrogen use efficiency under nitrogen limitation. Plant Journal, 2020, 103, 7-20.	5.7	76
53	A salt-regulated peptide derived from the CAP superfamily protein negatively regulates salt-stress tolerance inArabidopsis. Journal of Experimental Botany, 2015, 66, 5301-5313.	4.8	74
54	FIONA1 Is Essential for Regulating Period Length in theArabidopsisCircadian Clock. Plant Cell, 2008, 20, 307-319.	6.6	73

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55	High-Resolution Live-Cell Imaging and Analysis by Laser Desorption/Ionization Droplet Delivery Mass Spectrometry. Analytical Chemistry, 2016, 88, 5453-5461.	6.5	70
56	Genetic identification of FIN2, a far red light-specific signaling component ofArabidopsis thaliana. Plant Journal, 1998, 16, 411-419.	5.7	68
57	Evaluation of 515 expressed sequence tags obtained from guard cells of Brassica campestris. Planta, 1997, 202, 9-17.	3.2	64
58	Natural variations at the Stay-Green gene promoter control lifespan and yield in rice cultivars. Nature Communications, 2020, 11, 2819.	12.8	62
59	CRY1 inhibits COP1â€mediated degradation of BIT1, a MYB transcription factor, to activate blue lightâ€dependent gene expression in Arabidopsis. Plant Journal, 2008, 55, 361-371.	5.7	61
60	Age-dependent changes in the functions and compositions of photosynthetic complexes in the thylakoid membranes of Arabidopsis thaliana. Photosynthesis Research, 2013, 117, 547-556.	2.9	61
61	Age-associated circadian period changes in Arabidopsis leaves. Journal of Experimental Botany, 2016, 67, 2665-2673.	4.8	57
62	Brassinosteroid Biosynthesis Is Modulated via a Transcription Factor Cascade of COG1, PIF4, and PIF5. Plant Physiology, 2017, 174, 1260-1273.	4.8	55
63	ORESARA15, a PLATZ transcription factor, mediates leaf growth and senescence in Arabidopsis. New Phytologist, 2018, 220, 609-623.	7.3	55
64	BNIP3 is degraded by ULK1-dependent autophagy via MTORC1 and AMPK. Autophagy, 2013, 9, 345-360.	9.1	52
65	MicroRNAs in brain aging. Mechanisms of Ageing and Development, 2017, 168, 3-9.	4.6	51
66	GIGANTEA and EARLY FLOWERING 4 in Arabidopsis Exhibit Differential Phase-Specific Genetic Influences over a Diurnal Cycle. Molecular Plant, 2012, 5, 678-687.	8.3	50
67	miRâ€204 downregulates EphB2 in aging mouse hippocampal neurons. Aging Cell, 2016, 15, 380-388.	6.7	46
68	Involvement of the VEP1 Gene in Vascular Strand Development in Arabidopsis thaliana. Plant and Cell Physiology, 2002, 43, 323-330.	3.1	44
69	A GUS/Luciferase Fusion Reporter for Plant Gene Trapping and for Assay of Promoter Activity with Luciferin-Dependent Control of the Reporter Protein Stability. Plant and Cell Physiology, 2007, 48, 1121-1131.	3.1	44
70	How Do Phytochromes Transmit the Light Quality Information to the Circadian Clock in Arabidopsis ?. Molecular Plant, 2014, 7, 1701-1704.	8.3	44
71	OsASN1 Overexpression in Rice Increases Grain Protein Content and Yield under Nitrogen-Limiting Conditions. Plant and Cell Physiology, 2020, 61, 1309-1320.	3.1	39
72	Lossâ€ofâ€function of <scp>O</scp>s<scp>STN</scp>8 suppresses the photosystemÂ<scp>II</scp> core protein phosphorylation and interferes with the photosystemÂ<scp>II</scp> repair mechanism in rice (<scp>O</scp>ryza sativa). Plant Journal, 2013, 76, 675-686.	5.7	38

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73	Aging and senescence of the leaf organ. Journal of Plant Biology, 2007, 50, 291-300.	2.1	37
74	Antagonistic Roles of PhyA and PhyB in Far-Red Light-Dependent Leaf Senescence in Arabidopsis thaliana. Plant and Cell Physiology, 2018, 59, 1753-1764.	3.1	37
75	Two putative protein kinases from Arabidopsis thaliana contain highly acidic domains. Plant Molecular Biology, 1993, 22, 615-624.	3.9	36
76	Microdroplet fusion mass spectrometry: accelerated kinetics of acid-induced chlorophyll demetallation. Quarterly Reviews of Biophysics, 2017, 50, e2.	5.7	36
77	The promoter activity of sen 1, a senescence-associated gene of Arabidopsis, is repressed by sugars. Journal of Plant Physiology, 1997, 151, 339-345.	3.5	34
78	RNA helicase HEL-1 promotes longevity by specifically activating DAF-16/FOXO transcription factor signaling in Caenorhabditis elegans. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4246-55.	7.1	34
79	The Protein Trio RPK1â€“CaM4â€“RbohF Mediates Transient Superoxide Production to Trigger Age-Dependent Cell Death in Arabidopsis. Cell Reports, 2017, 21, 3373-3380.	6.4	34
80	Verticillium dahliae secretory effector PevD1 induces leaf senescence by promoting ORE1-mediated ethylene biosynthesis. Molecular Plant, 2021, 14, 1901-1917.	8.3	33
81	Functional complementation of a yeast vesicular transport mutation ypt1-1 by a Brassica napus cDNA clone encoding a small GTP-binding protein. Plant Molecular Biology, 1994, 26, 1725-1735.	3.9	32
82	Comparative transcriptome analysis in Arabidopsis ein2/ore3 and ahk3/ore12 mutants during dark-induced leaf senescence. Journal of Experimental Botany, 2018, 69, 3023-3036.	4.8	31
83	Spatial and temporal coordination of insulin granule exocytosis in intact human pancreatic islets. Diabetologia, 2015, 58, 2810-2818.	6.3	30
84	Spatial localization of charged molecules by salt ions in oil-confined water microdroplets. Science Advances, 2020, 6, .	10.3	29
85	Balanced Nucleocytosolic Partitioning Defines a Spatial Network to Coordinate Circadian Physiology in Plants. Developmental Cell, 2013, 26, 73-85.	7.0	28
86	ATM suppresses leaf senescence triggered by DNA doubleâ€strand break through epigenetic control of senescenceâ€associated genes in Arabidopsis. New Phytologist, 2020, 227, 473-484.	7.3	28
87	Insulin-induced maturation of Xenopus oocytes is inhibited by microinjection of a Brassica napus cDNA clone with high similarity to a mammalian receptor for activated protein kinase C. Planta, 1997, 201, 245-251.	3.2	27
88	Mitochondria Provide the Main Source of Cytosolic ATP for Activation of Outward-rectifying K+ Channels in Mesophyll Protoplast of Chlorophyll-deficient Mutant Rice (OsCHLH) Seedlings. Journal of Biological Chemistry, 2004, 279, 6874-6882.	3.4	27
89	The homeodomainâ€leucine zipper <scp>ATHB23</scp>, a phytochrome Bâ€interacting protein, is important for phytochrome Bâ€mediated red light signaling. Physiologia Plantarum, 2014, 150, 308-320.	5.2	27
90	A missense allele of KARRIKIN-INSENSITIVE2 impairs ligand-binding and downstream signaling in Arabidopsis thaliana. Journal of Experimental Botany, 2018, 69, 3609-3623.	4.8	26

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91	Molecule-level imaging of Pax6 mRNA distribution in mouse embryonic neocortex by molecular interaction force microscopy. Nucleic Acids Research, 2009, 37, e10-e10.	14.5	25
92	Subcellular Sites of the Signal Transduction and Degradation of Phytochrome A. Plant and Cell Physiology, 2010, 51, 1648-1660.	3.1	25
93	Rapamycin inhibits both motility through down-regulation of p-STAT3 (S727) by disrupting the mTORC2 assembly and peritoneal dissemination in sarcomatoid cholangiocarcinoma. Clinical and Experimental Metastasis, 2013, 30, 177-187.	3.3	24
94	Leaf Senescence in Plants: From Model Plants to Crops, Still so Many Unknowns. Journal of Integrative Plant Biology, 2012, 54, 514-515.	8.5	23
95	Inhibition of elongin C promotes longevity and protein homeostasis via <scp>HIF</scp>â€1 in C.Âelegans. Aging Cell, 2015, 14, 995-1002.	6.7	22
96	Restricted intramolecular rotation of fluorescent molecular rotors at the periphery of aqueous microdroplets in oil. Scientific Reports, 2020, 10, 16859.	3.3	22
97	Molecular bases for differential aging programs between flag and second leaves during grain-filling in rice. Scientific Reports, 2017, 7, 8792.	3.3	21
98	Temporal changes in cell division rate and genotoxic stress tolerance in quiescent center cells of Arabidopsis primary root apical meristem. Scientific Reports, 2019, 9, 3599.	3.3	20
99	<scp>NORE1</scp>/<scp>SAUL1</scp> integrates temperatureâ€dependent defense programs involving <scp>SGT1b</scp> and <scp>PAD4</scp> pathways and leaf senescence in Arabidopsis. Physiologia Plantarum, 2016, 158, 180-199.	5.2	19
100	A Brassica cDNA clone encoding a bifunctional hydroxymethylpyrimidine kinase/thiamin-phosphate pyrophosphorylase involved in thiamin biosynthesis. Plant Molecular Biology, 1998, 37, 955-966.	3.9	18
101	A new singleâ€step quantitative pathogen detection system: Templateâ€tagging followed by multiplex asymmetric PCR using common primers and CEâ€SSCP. Electrophoresis, 2009, 30, 2728-2736.	2.4	18
102	Downregulation of protein kinase CK2 activity induces age-related biomarkers inC. elegans. Oncotarget, 2017, 8, 36950-36963.	1.8	17
103	High-Throughput and Computational Study of Leaf Senescence through a Phenomic Approach. Frontiers in Plant Science, 2017, 8, 250.	3.6	15
104	Proteomic pattern-based analyses of light responses inArabidopsis thaliana wild-type and photoreceptor mutants. Proteomics, 2006, 6, 3040-3049.	2.2	14
105	Diet restrictionâ€induced healthy aging is mediated through the immune signaling component ZIPâ€2 in Caenorhabditis elegans. Aging Cell, 2019, 18, e12982.	6.7	12
106	RNA helicase SACY-1 is required for longevity caused by various genetic perturbations inCaenorhabditis elegans. Cell Cycle, 2016, 15, 1821-1829.	2.6	11
107	The C-Domain of the NAC Transcription Factor ANAC019 Is Necessary for pH-Tuned DNA Binding through a Histidine Switch in the N-Domain. Cell Reports, 2018, 22, 1141-1150.	6.4	11
108	Title is missing!. Molecular Breeding, 2002, 10, 11-18.	2.1	9

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109	A new selective â€˜turn-onâ€™ small fluorescent cationic probe for recognition of RNA in cells. Supramolecular Chemistry, 2015, 27, 478-483.	1.2	9
110	Gene duplication of type-B ARR transcription factors systematically extends transcriptional regulatory structures in Arabidopsis. Scientific Reports, 2015, 4, 7197.	3.3	9
111	Subcellular Localization of GIGANTEA Regulates the Timing of Leaf Senescence and Flowering in Arabidopsis. Frontiers in Plant Science, 2020, 11, 589707.	3.6	8
112	An S RNase Gene of Lycopersicon peruvianum L. is Highly Expressed in Transgenic Tobacco but Does not Affect Self-incompatibility. Journal of Plant Physiology, 1999, 154, 63-70.	3.5	7
113	Polarization-Controlled Photoswitching Resolves Dipole Directions with Subwavelength Resolution. Physical Review Letters, 2012, 109, 248101.	7.8	7
114	The core circadian component, Bmal1, is maintained in the pineal gland of old killifish brain. IScience, 2021, 24, 101905.	4.1	7
115	Frequent in-frame length variations are found in the diverged simple repeat sequences of the protein-coding regions of two putative protein kinase genes of Brassica napus. Plant Molecular Biology, 1995, 27, 829-833.	3.9	6
116	Evidence for the functional organization of chloroplasts in adaxial guard cells of Vicia faba leaves by single cell analysis. Plant Science, 2002, 162, 965-972.	3.6	6
117	Glutamate decarboxylase 67 contributes to compensatory insulin secretion in aged pancreatic islets. Islets, 2019, 11, 33-43.	1.8	6
118	Plasmids allowing transcription of cloned DNA by Salmonella typhimurium phage SP6 RNA polymerase to produce RNAs with authentic 5'-terminal sequences. Gene, 1986, 46, 57-64.	2.2	5
119	Expression of functional human-cytosolic Cu/Zn superoxide dismutase in transgenic tobacco. Biotechnology Letters, 2002, 24, 681-686.	2.2	5
120	Precise Expression Profiling by Stuffer-Free Multiplex Ligation-Dependent Probe Amplification. Analytical Chemistry, 2013, 85, 9383-9389.	6.5	5
121	Imaging a specific mRNA in pollen with atomic force microscopy. RSC Advances, 2015, 5, 18858-18865.	3.6	5
122	Rootin, a compound that inhibits root development through modulating PIN-mediated auxin distribution. Plant Science, 2015, 233, 116-126.	3.6	5
123	Simultaneous imaging of the topography and electrochemical activity of a 2D carbon nanotube network using a dual functional L-shaped nanoprobe. Analyst, The, 2015, 140, 3150-3156.	3.5	5
124	Sensitive multiplex RNA quantification using capillary electrophoresisâ€based singleâ€strand conformation polymorphism. Biotechnology and Bioengineering, 2010, 106, 167-172.	3.3	3
125	A cellular surveillance and defense system that delays aging phenotypes in C. elegans. Aging, 2020, 12, 8202-8220.	3.1	3
126	Meeting Report: International Symposium on the Genetics of Aging and Life History II. Aging, 2015, 7, 362-369.	3.1	2

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127	Rapid and transient induction of calmodulin-encoding gene(s) of Brassica napus by a touch stimulus. Plant Cell Reports, 1996, 15, 586-590.	5.6	2
128	Unusual Properties of Water at Heterogeneous Biological Interfaces. Biophysical Journal, 2020, 118, 476a.	0.5	1
129	Abiotic Fabrication of Sugar Phosphates and Ribonucleosides in Water Microdroplets. Biophysical Journal, 2018, 114, 438a.	0.5	0