Masanori Okamoto

List of Publications by Year
in descending order

57 papers	7,736 citations	136950 32 h-index	175258 52 g-index
58 all docs	58 docs citations	58 times ranked	7759 citing authors

#	Article	IF	Citations
1	The Arabidopsis cytochrome P450 CYP707A encodes ABA 8â€²-hydroxylases: key enzymes in ABA catabolism. EMBO Journal, 2004, 23, 1647-1656.	7.8	872
2	Genome-wide profiling of stored mRNA in Arabidopsis thaliana seed germination: epigenetic and genetic regulation of transcription in seed. Plant Journal, 2005, 41, 697-709.	5.7	528
3	Arabidopsis Transcriptome Analysis under Drought, Cold, High-Salinity and ABA Treatment Conditions using a Tiling Array. Plant and Cell Physiology, 2008, 49, 1135-1149.	3.1	475
4	CYP707A1 and CYP707A2, Which Encode Abscisic Acid 8â€²-Hydroxylases, Are Indispensable for Proper Control of Seed Dormancy and Germination in Arabidopsis. Plant Physiology, 2006, 141, 97-107.	4.8	473
5	Functional analysis of ArabidopsisNCED6andNCED9genes indicates that ABA synthesized in the endosperm is involved in the induction of seed dormancy. Plant Journal, 2006, 45, 309-319.	5.7	434
6	Regulation of hormone metabolism in Arabidopsis seeds: phytochrome regulation of abscisic acid metabolism and abscisic acid regulation of gibberellin metabolism. Plant Journal, 2006, 48, 354-366.	5.7	403
7	High Temperature-Induced Abscisic Acid Biosynthesis and Its Role in the Inhibition of Gibberellin Action in Arabidopsis Seeds Â Â Â Â. Plant Physiology, 2008, 146, 1368-1385.	4.8	379
8	Abscisic acid and the control of seed dormancy and germination. Seed Science Research, 2010, 20, 55-67.	1.7	369
9	The Transcription Factor FUSCA3 Controls Developmental Timing in Arabidopsis through the Hormones Gibberellin and Abscisic Acid. Developmental Cell, 2004, 7, 373-385.	7.0	352
10	Drought Induction of Arabidopsis 9-cis-Epoxycarotenoid Dioxygenase Occurs in Vascular Parenchyma Cells Â Â. Plant Physiology, 2008, 147, 1984-1993.	4.8	310
11	CYP707A3, a major ABA 8â€²-hydroxylase involved in dehydration and rehydration response inArabidopsis thaliana. Plant Journal, 2006, 46, 171-182.	5.7	294
12	Activation of dimeric ABA receptors elicits guard cell closure, ABA-regulated gene expression, and drought tolerance. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12132-12137.	7.1	262
13	Ethylene Promotes Submergence-Induced Expression of OsABA8ox1, a Gene that Encodes ABA 8'-Hydroxylase in Rice. Plant and Cell Physiology, 2006, 48, 287-298.	3.1	223
14	High Humidity Induces Abscisic Acid 8â€²-Hydroxylase in Stomata and Vasculature to Regulate Local and Systemic Abscisic Acid Responses in Arabidopsis. Plant Physiology, 2009, 149, 825-834.	4.8	216
15	Tuning water-use efficiency and drought tolerance in wheat using abscisic acid receptors. Nature Plants, 2019, 5, 153-159.	9.3	203
16	Small open reading frames associated with morphogenesis are hidden in plant genomes. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2395-2400.	7.1	178
17	NIN-like protein 8 is a master regulator of nitrate-promoted seed germination in Arabidopsis. Nature Communications, 2016, 7, 13179.	12.8	147
18	Conversion of carlactone to carlactonoic acid is a conserved function of <scp>MAX</scp>1 homologs in strigolactone biosynthesis. New Phytologist, 2018, 218, 1522-1533.	7.3	147

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19	Ectopic Expression of ABSCISIC ACID 2/GLUCOSE INSENSITIVE 1 in Arabidopsis Promotes Seed Dormancy and Stress Tolerance. Plant Physiology, 2007, 143, 745-758.	4.8	134
20	Activation of abscisic acid biosynthesis in the leaves of Arabidopsis thaliana in response to water deficit. Journal of Plant Research, 2009, 122, 235-243.	2.4	125
21	A Plant Growth Retardant, Uniconazole, Is a Potent Inhibitor of ABA Catabolism inArabidopsis. Bioscience, Biotechnology and Biochemistry, 2006, 70, 1731-1739.	1.3	109
22	Genome-wide analysis of endogenous abscisic acid-mediated transcription in dry and imbibed seeds of Arabidopsis using tiling arrays. Plant Journal, 2010, 62, 39-51.	5.7	109
23	Dynamic control of plant water use using designed ABA receptor agonists. Science, 2019, 366, .	12.6	107
24	Designed abscisic acid analogs as antagonists of PYL-PP2C receptor interactions. Nature Chemical Biology, 2014, 10, 477-482.	8.0	98
25	AtPep3 is a hormone-like peptide that plays a role in the salinity stress tolerance of plants. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5810-5815.	7.1	89
26	Small Molecule Probes of ABA Biosynthesis and Signaling. Plant and Cell Physiology, 2018, 59, 1490-1499.	3.1	70
27	Tissue-Specific Transcriptome Analysis Reveals Cell Wall Metabolism, Flavonol Biosynthesis and Defense Responses are Activated in the Endosperm of Germinating Arabidopsis thaliana Seeds. Plant and Cell Physiology, 2012, 53, 16-27.	3.1	58
28	ABA 9â€²-hydroxylation is catalyzed by CYP707A in Arabidopsis. Phytochemistry, 2011, 72, 717-722.	2.9	52
29	Abscinazole-E3M, a practical inhibitor of abscisic acid 8â€²-hydroxylase for improving drought tolerance. Scientific Reports, 2016, 6, 37060.	3.3	48
30	Transient expression of AtNCED3 and AAO3 genes in guard cells causes stomatal closure in Vicia faba. Journal of Plant Research, 2008, 121, 125-131.	2.4	43
31	RNA-Seq using bulked recombinant inbred line populations uncovers the importance of brassinosteroid for seed longevity after priming treatments. Scientific Reports, 2017, 7, 8095.	3.3	40
32	Origin and evolution of genes related to ABA metabolism and its signaling pathways. Journal of Plant Research, 2011, 124, 455-465.	2.4	39
33	Aberrant protein phosphatase 2C leads to abscisic acid insensitivity and high transpiration in parasitic Striga. Nature Plants, 2019, 5, 258-262.	9.3	29
34	Structure-Based Chemical Design of Abscisic Acid Antagonists That Block PYLâ€“PP2C Receptor Interactions. ACS Chemical Biology, 2018, 13, 1313-1321.	3.4	28
35	Arabidopsis Tiling Array Analysis to Identify the Stress-Responsive Genes. Methods in Molecular Biology, 2010, 639, 141-155.	0.9	27
36	Ligandâ€“receptor interactions in plant hormone signaling. Plant Journal, 2021, 105, 290-306.	5.7	27

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37	The selectivity of 6-nor-ABA and 7â€²-nor-ABA for abscisic acid receptor subtypes. Bioorganic and Medicinal Chemistry Letters, 2015, 25, 3507-3510.	2.2	26
38	Sm-Like Protein-Mediated RNA Metabolism Is Required for Heat Stress Tolerance in Arabidopsis. Frontiers in Plant Science, 2016, 7, 1079.	3.6	26
39	Conformationally restricted 3â€²-modified ABA analogs for controlling ABA receptors. Organic and Biomolecular Chemistry, 2015, 13, 4278-4288.	2.8	25
40	Click-to-lead design of a picomolar ABA receptor antagonist with potent activity in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	20
41	ABA Biosynthetic and Catabolic Pathways. , 2014, , 21-45.		20
42	ARTADE2DB: Improved Statistical Inferences for Arabidopsis Gene Functions and Structure Predictions by Dynamic Structure-Based Dynamic Expression (DSDE) Analyses. Plant and Cell Physiology, 2011, 52, 254-264.	3.1	15
43	Efficient anchoring of alien chromosome segments introgressed into bread wheat by new Leymus racemosus genome-based markers. BMC Genetics, 2018, 19, 18.	2.7	15
44	A Highly Specific Genome-Wide Association Study Integrated with Transcriptome Data Reveals the Contribution of Copy Number Variations to Specialized Metabolites in Arabidopsis thaliana Accessions. Molecular Biology and Evolution, 2017, 34, 3111-3122.	8.9	14
45	Genomic prediction modeling of soybean biomass using UAVâ€based remote sensing and longitudinal model parameters. Plant Genome, 2021, 14, e20157.	2.8	13
46	Chemical Promotion of Endogenous Amounts of ABA inArabidopsis thalianaby a Natural Product, Theobroxide. Plant and Cell Physiology, 2016, 57, 986-999.	3.1	11
47	Genetic manipulation of abscisic acid receptors enables modulation of water use efficiency. Plant Signaling and Behavior, 2019, 14, e1642039.	2.4	10
48	Substantial expression of novel small open reading frames inOryza sativa. Plant Signaling and Behavior, 2014, 9, e27848.	2.4	9
49	Chemical Control of ABA Receptors to Enable Plant Protection Against Water Stress. Methods in Molecular Biology, 2018, 1795, 127-141.	0.9	8
50	Positional correlation analysis improves reconstruction of full-length transcripts and alternative isoforms from noisy array signals or short reads. Bioinformatics, 2012, 28, 929-937.	4.1	6
51	Novel biotin linker with alkyne and amino groups for chemical labelling of a target protein of a bioactive small molecule. Bioorganic and Medicinal Chemistry Letters, 2018, 28, 783-786.	2.2	6
52	How does Striga hermonthica Bewitch its hosts?. Plant Signaling and Behavior, 2019, 14, 1605810.	2.4	6
53	Expression profile and 5â€™-terminal structure of Arabidopsis antisense transcripts expressed in seeds. Plant Signaling and Behavior, 2011, 6, 691-693.	2.4	4
54	Microarray Analysis for Studying the Abiotic Stress Responses in Plants. , 2010, , 333-355.		4

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55	A Comparison of Transcriptomes Between Germinating Seeds and Growing Axillary Buds of Arabidopsis. , 2015, , 223-233.		0
56	Technologies for the understanding and control of biological phenomena in field-grown plants. Ikushugaku Kenkyu, 2020, 22, 75-82.	0.3	0
57	Development of small molecules that improve drought stress tolerance in plants. Japanese Journal of Pesticide Science, 2021, 46, 122-128.	0.0	0