

# Hideki Takahashi

## List of Publications by Year in descending order

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78  
papers

11,112  
citations

47006

47  
h-index

74163

75  
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83  
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83  
docs citations

83  
times ranked

9176  
citing authors

#	ARTICLE	IF	CITATIONS
1	Improving nitrogen use efficiency: from cells to plant systems. <i>Journal of Experimental Botany</i> , 2020, 71, 4359-4364.	4.8	15
2	Integrating N signals and root growth: the role of nitrate transceptor NRT1.1 in auxin-mediated lateral root development. <i>Journal of Experimental Botany</i> , 2020, 71, 4365-4368.	4.8	22
3	Auxin-mediated root branching is determined by the form of available nitrogen. <i>Nature Plants</i> , 2020, 6, 1136-1145.	9.3	113
4	Involvement of a truncated MADS-box transcription factor ZmTMM1 in root nitrate foraging. <i>Journal of Experimental Botany</i> , 2020, 71, 4547-4561.	4.8	18
5	Sulfur nutrition: impacts on plant development, metabolism, and stress responses. <i>Journal of Experimental Botany</i> , 2019, 70, 4069-4073.	4.8	104
6	CLE-CLAVATA1 Signaling Pathway Modulates Lateral Root Development under Sulfur Deficiency. <i>Plants</i> , 2019, 8, 103.	3.5	28
7	Sulfate transport systems in plants: functional diversity and molecular mechanisms underlying regulatory coordination. <i>Journal of Experimental Botany</i> , 2019, 70, 4075-4087.	4.8	79
8	Nutrient-Responsive Small Signaling Peptides and Their Influence on the Root System Architecture. <i>International Journal of Molecular Sciences</i> , 2018, 19, 3927.	4.1	5
9	Contributions of two cytosolic glutamine synthetase isozymes to ammonium assimilation in <i>Arabidopsis</i> roots. <i>Journal of Experimental Botany</i> , 2017, 68, erw454.	4.8	49
10	Small peptide signaling pathways modulating macronutrient utilization in plants. <i>Current Opinion in Plant Biology</i> , 2017, 39, 31-39.	7.1	28
11	5' non-transcribed flanking region and 5' untranslated region play distinctive roles in sulfur deficiency induced expression of <i>SULFATE TRANSPORTER 1</i> in <i>Arabidopsis</i> roots. <i>Plant Biotechnology</i> , 2017, 34, 51-55.	1.0	0
12	Compartmentalization and Regulation of Sulfate Assimilation Pathways in Plants. <i>International Review of Cell and Molecular Biology</i> , 2016, 326, 1-31.	3.2	17
13	Statistical modeling of nitrogen-dependent modulation of root system architecture in <i>Arabidopsis thaliana</i> . <i>Journal of Integrative Plant Biology</i> , 2016, 58, 254-265.	8.5	40
14	Sulfur deficiency-induced repressor proteins optimize glucosinolate biosynthesis in plants. <i>Science Advances</i> , 2016, 2, e1601087.	10.3	127
15	CLE peptide signaling and nitrogen interactions in plant root development. <i>Plant Molecular Biology</i> , 2016, 91, 607-615.	3.9	25
16	Measurement of Uptake and Root-to-Shoot Distribution of Sulfate in <i>Arabidopsis</i> Seedlings. <i>Bio-protocol</i> , 2016, 6, .	0.4	2
17	Sulfur-Responsive Elements in the 3' Nontranscribed Intergenic Region Are Essential for the Induction of <i>SULFATE TRANSPORTER 2;1</i> Gene Expression in <i>Arabidopsis</i> Roots under Sulfur Deficiency. <i>Plant Cell</i> , 2015, 27, 1279-1296.	6.6	59
18	Editorial: Frontiers of Sulfur Metabolism in Plant Growth, Development, and Stress Response. <i>Frontiers in Plant Science</i> , 2015, 6, 1220.	3.6	38

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19	CLE peptides regulate lateral root development in response to nitrogen nutritional status of plants. <i>Plant Signaling and Behavior</i> , 2014, 9, e29302.	2.4	34
20	Preface. <i>Journal of Experimental Botany</i> , 2014, 65, 767-768.	4.8	1
21	CLE-CLAVATA1 peptide-receptor signaling module regulates the expansion of plant root systems in a nitrogen-dependent manner. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 2029-2034.	7.1	278
22	Plastid-cytosol partitioning and integration of metabolic pathways for APS/PAPS biosynthesis in <i>Arabidopsis thaliana</i> . <i>Frontiers in Plant Science</i> , 2014, 5, 751.	3.6	19
23	Alternative translational initiation of ATP sulfurylase underlying dual localization of sulfate assimilation pathways in plastids and cytosol in <i>Arabidopsis thaliana</i> . <i>Frontiers in Plant Science</i> , 2014, 5, 750.	3.6	38
24	Genome, Functional Gene Annotation, and Nuclear Transformation of the Heterokont Oleaginous Alga <i>Nannochloropsis oceanica</i> CCMP1779. <i>PLoS Genetics</i> , 2012, 8, e1003064.	3.5	376
25	Inferring transcriptional gene regulation network of starch metabolism in <i>Arabidopsis thaliana</i> leaves using graphical Gaussian model. <i>BMC Systems Biology</i> , 2012, 6, 100.	3.0	36
26	Evolutionary Relationships and Functional Diversity of Plant Sulfate Transporters. <i>Frontiers in Plant Science</i> , 2012, 2, 119.	3.6	101
27	Sulfur Assimilation in Photosynthetic Organisms: Molecular Functions and Regulations of Transporters and Assimilatory Enzymes. <i>Annual Review of Plant Biology</i> , 2011, 62, 157-184.	18.7	720
28	Metabolomics data reveal a crucial role of cytosolic glutamine synthetase 1;1 in coordinating metabolic balance in rice. <i>Plant Journal</i> , 2011, 66, 456-466.	5.7	133
29	Interplay of SLIM1 and miR395 in the regulation of sulfate assimilation in <i>Arabidopsis</i> . <i>Plant Journal</i> , 2011, 66, 863-876.	5.7	189
30	RiceFOX: A Database of <i>Arabidopsis</i> Mutant Lines Overexpressing Rice Full-Length cDNA that Contains a Wide Range of Trait Information to Facilitate Analysis of Gene Function. <i>Plant and Cell Physiology</i> , 2011, 52, 265-273.	3.1	72
31	Rice- <i>Arabidopsis</i> FOX line screening with FT-NIR-based fingerprinting for GC-TOF/MS-based metabolite profiling. <i>Metabolomics</i> , 2010, 6, 137-145.	3.0	25
32	Ammonium Triggers Lateral Root Branching in <i>Arabidopsis</i> in an AMMONIUM TRANSPORTER1;3-Dependent Manner. <i>Plant Cell</i> , 2010, 22, 3621-3633.	6.6	280
33	Regulation of Sulfate Transport and Assimilation in Plants. <i>International Review of Cell and Molecular Biology</i> , 2010, 281, 129-159.	3.2	77
34	AtAMT1;4, a Pollen-Specific High-Affinity Ammonium Transporter of the Plasma Membrane in <i>Arabidopsis</i> . <i>Plant and Cell Physiology</i> , 2009, 50, 13-25.	3.1	91
35	CHOTTO1, a Double AP2 Domain Protein of <i>Arabidopsis thaliana</i> , Regulates Germination and Seedling Growth Under Excess Supply of Glucose and Nitrate. <i>Plant and Cell Physiology</i> , 2009, 50, 330-340.	3.1	60
36	Disruption of Adenosine-5'-Phosphosulfate Kinase in <i>Arabidopsis</i> Reduces Levels of Sulfated Secondary Metabolites. <i>Plant Cell</i> , 2009, 21, 910-927.	6.6	180

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37	Sulphur starvation induces the expression of microRNAâ€³95 and one of its target genes but in different cell types. <i>Plant Journal</i> , 2009, 57, 313-321.	5.7	377
38	Systematic approaches to using the FOX hunting system to identify useful rice genes. <i>Plant Journal</i> , 2009, 57, 883-894.	5.7	121
39	Transcriptome analyses give insights into seleniumâ€™stress responses and selenium tolerance mechanisms in <i>Arabidopsis</i> . <i>Physiologia Plantarum</i> , 2008, 132, 236-253.	5.2	164
40	The AtGenExpress hormone and chemical treatment data set: experimental design, data evaluation, model data analysis and data access. <i>Plant Journal</i> , 2008, 55, 526-542.	5.7	467
41	æç%©ã«ãšãšã,ç¡«é»,ä»£è-ã®è³¿ç-€. <i>Kagaku To Seibutsu</i> , 2008, 46, 850-858.	0.0	0
42	Molecular Biology and Functional Genomics for Identification of Regulatory Networks of Plant Sulfate Uptake and Assimilatory Metabolism. <i>Advances in Photosynthesis and Respiration</i> , 2008, , 149-159.	1.0	3
43	Posttranscriptional Regulation of High-Affinity Sulfate Transporters in <i>Arabidopsis</i> by Sulfur Nutrition. <i>Plant Physiology</i> , 2007, 145, 378-388.	4.8	134
44	An <i>Arabidopsis thaliana</i> high-affinity molybdate transporter required for efficient uptake of molybdate from soil. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 18807-18812.	7.1	236
45	The Organization of High-Affinity Ammonium Uptake in <i>Arabidopsis</i> Roots Depends on the Spatial Arrangement and Biochemical Properties of AMT1-Type Transporters. <i>Plant Cell</i> , 2007, 19, 2636-2652.	6.6	330
46	Sulfur-responsive promoter of sulfate transporter gene is potentially useful to detect and quantify selenate and chromate. <i>Plant Biotechnology</i> , 2007, 24, 261-263.	1.0	6
47	Identification of Genes Involved in Anthocyanin Accumulation by Integrated Analysis of Metabolome and Transcriptome in Pap1-Overexpressing <i>Arabidopsis</i> Plants. , 2007, , 159-168.		2
48	<i>Arabidopsis</i> SLIM1 Is a Central Transcriptional Regulator of Plant Sulfur Response and Metabolism. <i>Plant Cell</i> , 2006, 18, 3235-3251.	6.6	337
49	Anionic Nutrient Transport in Plants: The Molecular Basis of the Sulfate Transporter Gene Family. , 2006, 27, 67-80.		5
50	Additive contribution of AMT1;1 and AMT1;3 to high-affinity ammonium uptake across the plasma membrane of nitrogen-deficient <i>Arabidopsis</i> roots. <i>Plant Journal</i> , 2006, 48, 522-534.	5.7	199
51	Gln49 and Ser174 Residues Play Critical Roles in Determining the Catalytic Efficiencies of Plant Glutamine Synthetase. <i>Plant and Cell Physiology</i> , 2006, 47, 299-303.	3.1	16
52	The function of SULTR2;1 sulfate transporter during seed development in <i>Arabidopsis thaliana</i> . <i>Physiologia Plantarum</i> , 2005, 125, 95-105.	5.2	40
53	Identification of a novel cis-acting element conferring sulfur deficiency response in <i>Arabidopsis</i> roots. <i>Plant Journal</i> , 2005, 42, 305-314.	5.7	240
54	Functional genomics by integrated analysis of metabolome and transcriptome of <i>Arabidopsis</i> plants over-expressing an MYB transcription factor. <i>Plant Journal</i> , 2005, 42, 218-235.	5.7	891

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55	Severe reduction in growth rate and grain filling of rice mutants lacking OsGS1;1, a cytosolic glutamine synthetase1;1. <i>Plant Journal</i> , 2005, 42, 641-651.	5.7	258
56	Overexpression of AtCpNifS Enhances Selenium Tolerance and Accumulation in Arabidopsis. <i>Plant Physiology</i> , 2005, 139, 1518-1528.	4.8	127
57	Induction of SULTR1;1 Sulfate Transporter in Arabidopsis Roots Involves Protein Phosphorylation/Dephosphorylation Circuit for Transcriptional Regulation. <i>Plant and Cell Physiology</i> , 2004, 45, 340-345.	3.1	80
58	Biochemical Background and Compartmentalized Functions of Cytosolic Glutamine Synthetase for Active Ammonium Assimilation in Rice Roots. <i>Plant and Cell Physiology</i> , 2004, 45, 1640-1647.	3.1	130
59	Kinetic Properties and Ammonium-dependent Regulation of Cytosolic Isoenzymes of Glutamine Synthetase in Arabidopsis. <i>Journal of Biological Chemistry</i> , 2004, 279, 16598-16605.	3.4	171
60	Plant sulphate transporters: co-ordination of uptake, intracellular and long-distance transport. <i>Journal of Experimental Botany</i> , 2004, 55, 1765-1773.	4.8	258
61	Vacuolar Sulfate Transporters Are Essential Determinants Controlling Internal Distribution of Sulfate in Arabidopsis. <i>Plant Cell</i> , 2004, 16, 2693-2704.	6.6	302
62	Root-to-Shoot Transport of Sulfate in Arabidopsis. Evidence for the Role of SULTR3;5 as a Component of Low-Affinity Sulfate Transport System in the Root Vasculature. <i>Plant Physiology</i> , 2004, 136, 4198-4204.	4.8	251
63	Regulation of high-affinity sulphate transporters in plants: towards systematic analysis of sulphur signalling and regulation. <i>Journal of Experimental Botany</i> , 2004, 55, 1843-1849.	4.8	111
64	A novel regulatory pathway of sulfate uptake in Arabidopsis roots: implication of CRE1/WOL/AHK4-mediated cytokinin-dependent regulation. <i>Plant Journal</i> , 2004, 38, 779-789.	5.7	175
65	Cell type distinct accumulations of mRNA and protein for NADH-dependent glutamate synthase in rice roots in response to the supply of NH <sub>4</sub> <sup>+</sup> . <i>Plant Physiology and Biochemistry</i> , 2003, 41, 643-647.	5.8	37
66	Transcriptome Profiling of Sulfur-Responsive Genes in Arabidopsis Reveals Global Effects of Sulfur Nutrition on Multiple Metabolic Pathways. <i>Plant Physiology</i> , 2003, 132, 597-605.	4.8	286
67	Phloem-Localizing Sulfate Transporter, Sultr1;3, Mediates Re-Distribution of Sulfur from Source to Sink Organs in Arabidopsis. <i>Plant Physiology</i> , 2003, 131, 1511-1517.	4.8	195
68	Two distinct high-affinity sulfate transporters with different inducibilities mediate uptake of sulfate in Arabidopsis roots. <i>Plant Journal</i> , 2002, 29, 465-473.	5.7	320
69	MACRONUTRIENT UTILIZATION BY PHOTOSYNTHETIC EUKARYOTES AND THE FABRIC OF INTERACTIONS. <i>Annual Review of Plant Biology</i> , 2001, 52, 163-210.	14.3	167
70	Sulfur Economy and Cell Wall Biosynthesis during Sulfur Limitation of <i>Chlamydomonas reinhardtii</i> . <i>Plant Physiology</i> , 2001, 127, 665-673.	4.8	68
71	Serine Acetyltransferase Involved in Cysteine Biosynthesis from Spinach: Molecular Cloning, Characterization and Expression Analysis of cDNA Encoding a Plastidic Isoform. <i>Plant and Cell Physiology</i> , 2001, 42, 627-634.	3.1	36
72	The roles of three functional sulphate transporters involved in uptake and translocation of sulphate in Arabidopsis thaliana. <i>Plant Journal</i> , 2000, 23, 171-182.	5.7	523

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73	Gene note. Cloning of an Arabidopsis cDNA encoding a chloroplast localizing sulphate transporter isoform. <i>Journal of Experimental Botany</i> , 1999, 50, 1713-1714.	4.8	38
74	Regulation of sulfur assimilation in higher plants: A sulfate transporter induced in sulfate-starved roots plays a central role in <i>Arabidopsis thaliana</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1997, 94, 11102-11107.	7.1	330
75	Molecular cloning, characterization and expression of cDNA encoding phosphoserine aminotransferase involved in phosphorylated pathway of serine biosynthesis from spinach. <i>Plant Molecular Biology</i> , 1997, 33, 359-366.	3.9	24
76	Isolation and characterization of a cDNA encoding a sulfate transporter from <i>Arabidopsis thaliana</i> . <i>FEBS Letters</i> , 1996, 392, 95-99.	2.8	60
77	Tissue-Specific Activity of Two Manganese Superoxide Dismutase Promoters in Transgenic Tobacco. <i>Plant Physiology</i> , 1996, 112, 525-535.	4.8	24
78	Subcellular Localization of Spinach Cysteine Synthase Isoforms and Regulation of Their Gene Expression by Nitrogen and Sulfur. <i>Plant Physiology</i> , 1996, 112, 273-280.	4.8	84