

# Thomas Leustek

## List of Publications by Year in descending order

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64  
papers

4,871  
citations

87888

38  
h-index

128289

60  
g-index

64  
all docs

64  
docs citations

64  
times ranked

3791  
citing authors

#	ARTICLE	IF	CITATIONS
1	PATHWAYS AND REGULATION OF SULFUR METABOLISM REVEALED THROUGH MOLECULAR AND GENETIC STUDIES. Annual Review of Plant Biology, 2000, 51, 141-165.	14.3	591
2	Sulfate Transport and Assimilation in Plants. Plant Physiology, 1999, 120, 637-644.	4.8	456
3	Inter-organ signaling in plants: regulation of ATP sulfurylase and sulfate transporter genes expression in roots mediated by phloem-translocated compound. Plant Journal, 1999, 18, 89-95.	5.7	288
4	A new route for synthesis of dimethylsulphoniopropionate in marine algae. Nature, 1997, 387, 891-894.	27.8	189
5	Evidence for Autoregulation of Cystathionine $\gamma$ -Synthase mRNA Stability in Arabidopsis. Science, 1999, 286, 1371-1374.	12.6	181
6	Analysis of sulfur and selenium assimilation in Astragalus plants with varying capacities to accumulate selenium. Plant Journal, 2005, 42, 785-797.	5.7	178
7	Regulation of the Plant-type 5'-Adenylyl Sulfate Reductase by Oxidative Stress. Biochemistry, 2001, 40, 9040-9048.	2.5	155
8	Recombinant Arabidopsis SQD1 Converts UDP-glucose and Sulfite to the Sulfolipid Head Group Precursor UDP-sulfoquinovose in Vitro. Journal of Biological Chemistry, 2001, 276, 3941-3946.	3.4	135
9	Differential Subcellular Localization and Expression of ATP Sulfurylase and 5'-Adenylylsulfate Reductase during Ontogenesis of Arabidopsis Leaves Indicates That Cytosolic and Plastid Forms of ATP Sulfurylase May Have Specialized Functions. Plant Physiology, 2000, 124, 715-724.	4.8	121
10	L,L-diaminopimelate aminotransferase, a trans-kingdom enzyme shared by Chlamydia and plants for synthesis of diaminopimelate/lysine. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17909-17914.	7.1	121
11	Identification of a New Class of 5'-Adenylylsulfate (APS) Reductases from Sulfate-Assimilating Bacteria. Journal of Bacteriology, 2000, 182, 135-142.	2.2	118
12	An L-Diaminopimelate Aminotransferase Defines a Novel Variant of the Lysine Biosynthesis Pathway in Plants. Plant Physiology, 2006, 140, 292-301.	4.8	115
13	The affect of cadmium on sulfate assimilation enzymes in Brassica juncea. Plant Science, 1999, 141, 201-207.	3.6	114
14	Sulfate reduction is increased in transgenic Arabidopsis thaliana expressing 5'-adenylylsulfate reductase from Pseudomonas aeruginosa. Plant Journal, 2002, 32, 879-889.	5.7	112
15	Constitutive Overexpression of Cystathionine $\gamma$ -Synthase in Arabidopsis Leads to Accumulation of Soluble Methionine and S-Methylmethionine. Plant Physiology, 2002, 128, 95-107.	4.8	100
16	Localization of Members of the $\gamma$ -Glutamyl Transpeptidase Family Identifies Sites of Glutathione and Glutathione S-Conjugate Hydrolysis. Plant Physiology, 2007, 144, 1715-1732.	4.8	98
17	Adenosine-5'-Triphosphate-Sulfurylase from Arabidopsis thaliana and Escherichia coli Are Functionally Equivalent but Structurally and Kinetically Divergent: Nucleotide Sequence of Two Adenosine-5'-Triphosphate-Sulfurylase cDNAs from Arabidopsis thaliana and Analysis of a Recombinant Enzyme. Archives of Biochemistry and Biophysics, 1995, 323, 195-204.	3.0	82
18	Functional characterization of a gene encoding a fourth ATP sulfurylase isoform from Arabidopsis thaliana. Gene, 2000, 248, 51-58.	2.2	80

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19	The role of 5â€²-adenylylsulfate reductase in controlling sulfate reduction in plants. <i>Photosynthesis Research</i> , 2005, 86, 309-323.	2.9	80
20	Molecular genetics of sulfate assimilation in plants. <i>Physiologia Plantarum</i> , 1996, 97, 411-419.	5.2	79
21	Plant sulfur metabolism â€” the reduction of sulfate to sulfite. <i>Current Opinion in Plant Biology</i> , 1998, 1, 240-244.	7.1	79
22	The sac Mutants of <i>Chlamydomonas reinhardtii</i> Reveal Transcriptional and Posttranscriptional Control of Cysteine Biosynthesis. <i>Plant Physiology</i> , 2002, 130, 2076-2084.	4.8	77
23	Repression of cystathionine Î³-synthase in <i>Arabidopsis thaliana</i> produces partial methionine auxotrophy and developmental abnormalities. <i>Plant Science</i> , 2000, 151, 9-18.	3.6	74
24	Aberrant gene expression in the <i>Arabidopsis</i> <i>SULTR1;2</i> mutants suggests a possible regulatory role for this sulfate transporter in response to sulfur nutrient status. <i>Plant Journal</i> , 2014, 77, 185-197.	5.7	72
25	Genetic Dissection of Histidine Biosynthesis in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2007, 144, 890-903.	4.8	71
26	Cloning and analysis of the gene for cystathionine Î³-synthase from <i>Arabidopsis thaliana</i> . <i>Plant Molecular Biology</i> , 1996, 32, 1117-1124.	3.9	65
27	Sulfate Metabolism. <i>The Arabidopsis Book</i> , 2002, 1, e0017.	0.5	64
28	Methionine and threonine synthesis are limited by homoserine availability and not the activity of homoserine kinase in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2005, 41, 685-696.	5.7	62
29	Characterization of Sulfate Assimilation in Marine Algae Focusing on the Enzyme 5â€²-Adenylylsulfate Reductase1. <i>Plant Physiology</i> , 2000, 123, 1087-1096.	4.8	61
30	Biosynthesis of lysine in plants: evidence for a variant of the known bacterial pathways. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2005, 1721, 27-36.	2.4	61
31	A multifunctional <i>Urechis caupo</i> protein, PAPS synthetase, has both ATP sulfurylase and APS kinase activities. <i>Gene</i> , 1995, 165, 243-248.	2.2	60
32	Analysis of the isopentenyl diphosphate isomerase gene family from <i>Arabidopsis thaliana</i> . <i>Plant Molecular Biology</i> , 1998, 36, 323-328.	3.9	60
33	Identification and Stereospecificity of the First Three Enzymes of 3-Dimethylsulfoniopropionate Biosynthesis in a Chlorophyte Alga1. <i>Plant Physiology</i> , 1998, 116, 369-378.	4.8	60
34	Engineering sulfur storage in maize seed proteins without apparent yield loss. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 11386-11391.	7.1	53
35	Siroheme Biosynthesis in Higher Plants. <i>Journal of Biological Chemistry</i> , 1997, 272, 2744-2752.	3.4	52
36	Calcium-dependent autophosphorylation of the glucose-regulated protein, Grp78. <i>Archives of Biochemistry and Biophysics</i> , 1991, 289, 256-261.	3.0	44

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37	APS Kinase from <i>Arabidopsis thaliana</i> : Genomic Organization, Expression, and Kinetic Analysis of the Recombinant Enzyme. <i>Biochemical and Biophysical Research Communications</i> , 1998, 247, 171-175.	2.1	42
38	<i>Arabidopsis</i> Î³-glutamylcyclotransferase affects glutathione content and root system architecture during sulfur starvation. <i>New Phytologist</i> , 2019, 221, 1387-1397.	7.3	42
39	Properties of the Cysteine Residues and Iron-Sulfur Cluster of the Assimilatory 5'-Adenylyl Sulfate Reductase from <i>Pseudomonas aeruginosa</i> . <i>Biochemistry</i> , 2004, 43, 13478-13486.	2.5	40
40	Biochemical and Phylogenetic Characterization of a Novel Diaminopimelate Biosynthesis Pathway in Prokaryotes Identifies a Diverged Form of <i>scpII</i> -Diaminopimelate Aminotransferase. <i>Journal of Bacteriology</i> , 2008, 190, 3256-3263.	2.2	38
41	Overexpression of serine acetyltransferase in maize leaves increases seed-specific methionine-rich zeins. <i>Plant Biotechnology Journal</i> , 2018, 16, 1057-1067.	8.3	37
42	Identification of the Gene Encoding Homoserine Kinase from <i>Arabidopsis thaliana</i> and Characterization of the Recombinant Enzyme Derived from the Gene. <i>Archives of Biochemistry and Biophysics</i> , 1999, 372, 135-142.	3.0	36
43	Constitutive overexpression of cystathionine gamma-synthase in <i>Arabidopsis</i> leads to accumulation of soluble methionine and S-methylmethionine. <i>Plant Physiology</i> , 2002, 128, 95-107.	4.8	32
44	A transgene for high methionine protein is posttranscriptionally regulated by methionine. <i>In Vitro Cellular and Developmental Biology - Plant</i> , 2005, 41, 731-741.	2.1	26
45	Transceptors at the boundary of nutrient transporters and receptors: a new role for <i>Arabidopsis</i> SULTR1;2 in sulfur sensing. <i>Frontiers in Plant Science</i> , 2014, 5, 710.	3.6	23
46	The interaction of 5'-adenylylsulfate reductase from <i>Pseudomonas aeruginosa</i> with its substrates. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2005, 1710, 103-112.	1.0	19
47	Dual diaminopimelate biosynthesis pathways in <i>Bacteroides fragilis</i> and <i>Clostridium thermocellum</i> . <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2011, 1814, 1162-1168.	2.3	17
48	Two <i>Arabidopsis thaliana</i> dihydrodipicolinate synthases, DHGPS1 and DHGPS2, are unequally redundant. <i>Functional Plant Biology</i> , 2012, 39, 1058.	2.1	15
49	Properties of the Cysteine Residues and the Iron-Sulfur Cluster of the Assimilatory 5'-Adenylyl Sulfate Reductase from <i>Enteromorpha intestinalis</i> . <i>Biochemistry</i> , 2006, 45, 5010-5018.	2.5	14
50	Phylogenetic Analysis of Sulfate Assimilation and Cysteine Biosynthesis in Phototrophic Organisms. <i>Advances in Photosynthesis and Respiration</i> , 2008, , 31-58.	1.0	14
51	Cloning and bacterial expression of adenosine-5'-triphosphate sulfurylase from the enteric protozoan parasite <i>Entamoeba histolytica</i> . <i>BBA - Proteins and Proteomics</i> , 1998, 1429, 284-291.	2.1	11
52	The Two-Domain Structure of 5'-Adenylylsulfate (APS) Reductase from <i>Enteromorpha intestinalis</i> is a Requirement for Efficient APS Reductase Activity. <i>Biochemistry</i> , 2007, 46, 591-601.	2.5	11
53	Inhibition of <i>Arabidopsis</i> growth by the allelopathic compound azetidine-2-carboxylate is due to the low amino acid specificity of cytosolic prolyl-tRNA synthetase. <i>Plant Journal</i> , 2016, 88, 236-246.	5.7	11
54	Sulfur metabolism in plants and algae -- a case study for an integrative scientific approach. <i>Photosynthesis Research</i> , 2005, 86, 297-298.	2.9	10

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55	Differential response of orthologous l,l-diaminopimelate aminotransferases (DapL) to enzyme inhibitory antibiotic lead compounds. <i>Bioorganic and Medicinal Chemistry</i> , 2014, 22, 523-530.	3.0	9
56	Introduction to Sulfur Metabolism in Phototrophic Organisms. <i>Advances in Photosynthesis and Respiration</i> , 2008, , 1-14.	1.0	5
57	Interaction Domain on Thioredoxin for <i>Pseudomonas aeruginosa</i> 5â€²-Adenylylsulfate Reductase. <i>Journal of Biological Chemistry</i> , 2009, 284, 31181-31189.	3.4	4
58	The <i>Arabidopsis thaliana</i> adenosine 5â€²-phosphosulfate reductase 2 (AtAPR2) participates in flowering time and glucose response. <i>Journal of Plant Biology</i> , 2015, 58, 128-136.	2.1	2
59	Advances in understanding sulfur utilization efficiency in plants. , 2017, , 215-232.		2
60	A luciferase-based method for assay of 5â€²-adenylylsulfate reductase. <i>Analytical Biochemistry</i> , 2014, 460, 22-28.	2.4	1
61	Is GRP78 a Sensor of Cellular Secretory Activity?. , 1992, 14, 125-137.		1
62	You cannot oxidize what you cannot reach: Oxidative susceptibility of buried methionine residues. <i>Journal of Biological Chemistry</i> , 2022, 298, 101973.	3.4	1
63	SULTR1;2 in S Nutrient-Status Control in <i>Arabidopsis</i> . <i>Proceedings of the International Plant Sulfur Workshop</i> , 2015, , 81-91.	0.1	0
64	Interactions of 5â€²-Adenylylphosphosulfate Reductase from <i>Pseudomonas aeruginosa</i> with substrates. <i>FASEB Journal</i> , 2008, 22, 341-341.	0.5	0