RÃ¼diger Hell

List of Publications by Year
in descending order

163 papers	14,285 citations	12303 69 h-index	22102 113 g-index
178 all docs	178 docs citations	178 times ranked	12570 citing authors

#	Article	IF	Citations
1	Accumulation of acetaldehyde in aldh2.1 zebrafish causes increased retinal angiogenesis and impaired glucose metabolism. Redox Biology, 2022, 50, 102249.	3.9	9
2	Cotranslational N-degron masking by acetylation promotes proteome stability in plants. Nature Communications, 2022, 13, 810.	5.8	29
3	Deep Metabolic Profiling Assessment of Tissue Extraction Protocols for Three Model Organisms. Frontiers in Chemistry, 2022, 10, 869732.	1.8	6
4	HYPK promotes the activity of the <i>N</i> ^{Î±} -acetyltransferase A complex to determine proteostasis of nonAc-X ² /N-degronâ€“containing proteins. Science Advances, 2022, 8, .	4.7	11
5	The plant TOR kinase tunes autophagy and meristem activity for nutrient stress-induced developmental plasticity. Plant Cell, 2022, 34, 3814-3829.	3.1	14
6	Abrogating <scp>GPT2</scp> in tripleâ€negative breast cancer inhibits tumor growth and promotes autophagy. International Journal of Cancer, 2021, 148, 1993-2009.	2.3	14
7	A molecular switch in sulfur metabolism to reduce arsenic and enrich selenium in rice grain. Nature Communications, 2021, 12, 1392.	5.8	48
8	The function of glutaredoxin GRXS15 is required for lipoyl-dependent dehydrogenases in mitochondria. Plant Physiology, 2021, 186, 1507-1525.	2.3	12
9	Metabolite Profiling in Arabidopsisthaliana with Moderately Impaired Photorespiration Reveals Novel Metabolic Links and Compensatory Mechanisms of Photorespiration. Metabolites, 2021, 11, 391.	1.3	17
10	GSNOR Contributes to Demethylation and Expression of Transposable Elements and Stress-Responsive Genes. Antioxidants, 2021, 10, 1128.	2.2	10
11	Reduced Acrolein Detoxification in <i>akr1a1a</i> Zebrafish Mutants Causes Impaired Insulin Receptor Signaling and Microvascular Alterations. Advanced Science, 2021, 8, e2101281.	5.6	11
12	Micrografting Provides Evidence for Systemic Regulation of Sulfur Metabolism between Shoot and Root. Plants, 2021, 10, 1729.	1.6	1
13	A Novel UPLC-MS/MS Method Identifies Organ-Specific Dipeptide Profiles. International Journal of Molecular Sciences, 2021, 22, 9979.	1.8	7
14	A Low Level of NaCl Stimulates Plant Growth by Improving Carbon and Sulfur Assimilation in Arabidopsis thaliana. Plants, 2021, 10, 2138.	1.6	7
15	Disruption of the NÎ±-Acetyltransferase NatB Causes Sensitivity to Reductive Stress in Arabidopsis thaliana. Frontiers in Plant Science, 2021, 12, 799954.	1.7	6
16	Prognostic associations of circulating phytoestrogens and biomarker changes in long-term survivors of postmenopausal breast cancer. Nutrition and Cancer, 2020, 72, 1155-1169.	0.9	8
17	Redox-mediated kick-start of mitochondrial energy metabolism drives resource-efficient seed germination. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 741-751.	3.3	96
18	NatB-Mediated N-Terminal Acetylation Affects Growth and Biotic Stress Responses. Plant Physiology, 2020, 182, 792-806.	2.3	44

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19	Elevated 4-hydroxynonenal induces hyperglycaemia via Aldh3a1 loss in zebrafish and associates with diabetes progression in humans. Redox Biology, 2020, 37, 101723.	3.9	36
20	Regulation of Gluconeogenesis by Aldo-keto-reductase 1a1b in Zebrafish. IScience, 2020, 23, 101763.	1.9	9
21	NAA50 Is an Enzymatically Active <i>N</i>^{Î±}-Acetyltransferase That Is Crucial for Development and Regulation of Stress Responses. Plant Physiology, 2020, 183, 1502-1516.	2.3	23
22	The Arabidopsis N^{Î±}â€acetyltransferase NAA60 locates to the plasma membrane and is vital for the high salt stress response. New Phytologist, 2020, 228, 554-569.	3.5	25
23	Sulfur metabolic engineering enhances cadmium stress tolerance and root to shoot iron translocation in Brassica napus L. Plant Physiology and Biochemistry, 2020, 152, 32-43.	2.8	17
24	Dual lysine and Nâ€terminal acetyltransferases reveal the complexity underpinning protein acetylation. Molecular Systems Biology, 2020, 16, e9464.	3.2	53
25	Impact of pulsed <scp>UVâ€B</scp> stress exposure on plant performance: How recovery periods stimulate secondary metabolism while reducing adaptive growth attenuation. Plant, Cell and Environment, 2019, 42, 801-814.	2.8	25
26	The <i>Arabidopsis </i><scp>THADA</scp> homologue modulates <scp>TOR</scp> activity and cold acclimation. Plant Biology, 2019, 21, 77-83.	1.8	31
27	Arabidopsis glutathione reductase 2 is indispensable in plastids, while mitochondrial glutathione is safeguarded by additional reduction and transport systems. New Phytologist, 2019, 224, 1569-1584.	3.5	57
28	Staphylococcus aureus Uses the Bacilliredoxin (BrxAB)/Bacillithiol Disulfide Reductase (YpdA) Redox Pathway to Defend Against Oxidative Stress Under Infections. Frontiers in Microbiology, 2019, 10, 1355.	1.5	31
29	The Recovery from Sulfur Starvation is Independent from the mRNA Degradation Initiation Enzyme PARN in Arabidopsis. Plants, 2019, 8, 380.	1.6	4
30	Sulfate-Induced Stomata Closure Requires the Canonical ABA Signal Transduction Machinery. Plants, 2019, 8, 21.	1.6	19
31	Distribution of control in the sulfur assimilation in <i>Arabidopsis thaliana</i> depends on environmental conditions. New Phytologist, 2019, 222, 1392-1404.	3.5	16
32	Serum Concentration of Genistein, Luteolin and Colorectal Cancer Prognosis. Nutrients, 2019, 11, 600.	1.7	13
33	Plant glutathione biosynthesis revisited: redox-mediated activation of glutamylcysteine ligase does not require homo-dimerization. Biochemical Journal, 2019, 476, 1191-1203.	1.7	14
34	SULTR3s Function in Chloroplast Sulfate Uptake and Affect ABA Biosynthesis and the Stress Response. Plant Physiology, 2019, 180, 593-604.	2.3	50
35	Inhibition of Endothelial Notch Signaling Impairs Fatty Acid Transport and Leads to Metabolic and Vascular Remodeling of the Adult Heart. Circulation, 2018, 137, 2592-2608.	1.6	103
36	Obituary and Tribute: Martin Bopp, 1923â€"2018. Journal of Plant Physiology, 2018, 230, 122-125.	1.6	0

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37	Sulfate is Incorporated into Cysteine to Trigger ABA Production and Stomatal Closure. Plant Cell, 2018, 30, 2973-2987.	3.1	85
38	Glucocorticoid deficiency causes transcriptional and post-transcriptional reprogramming of glutamine metabolism. EBioMedicine, 2018, 36, 376-389.	2.7	12
39	Sulfur Partitioning between Glutathione and Protein Synthesis Determines Plant Growth. Plant Physiology, 2018, 177, 927-937.	2.3	66
40	Strigolactone- and Karrikin-Independent SMXL Proteins Are Central Regulators of Phloem Formation. Current Biology, 2017, 27, 1241-1247.	1.8	117
41	Monitoring global protein thiol-oxidation and protein S-mycothiolation in Mycobacterium smegmatis under hypochlorite stress. Scientific Reports, 2017, 7, 1195.	1.6	47
42	PII Protein-Derived FRET Sensors for Quantification and Live-Cell Imaging of 2-Oxoglutarate. Scientific Reports, 2017, 7, 1437.	1.6	29
43	Drought-Enhanced Xylem Sap Sulfate Closes Stomata by Affecting ALMT12 and Guard Cell ABA Synthesis. Plant Physiology, 2017, 174, 798-814.	2.3	95
44	Apoplastic gamma-glutamyl transferase activity encoded by GGT1 and GGT2 is important for vegetative and generative development. Plant Physiology and Biochemistry, 2017, 115, 44-56.	2.8	17
45	Branchedâ€chain ketoacids secreted by glioblastoma cells via <scp>MCT</scp> 1 modulate macrophage phenotype. EMBO Reports, 2017, 18, 2172-2185.	2.0	74
46	Nothing in Biology Makes Sense But in the Light of Redox Regulation. Plant and Cell Physiology, 2017, 58, 1823-1825.	1.5	1
47	The glyceraldehyde-3-phosphate dehydrogenase GapDH of Corynebacterium diphtheriae is redox-controlled by protein S-mycothiolation under oxidative stress. Scientific Reports, 2017, 7, 5020.	1.6	24
48	BCAT1 restricts Î±KG levels in AML stem cells leading to IDHmut-like DNA hypermethylation. Nature, 2017, 551, 384-388.	13.7	261
49	The redoxâ€sensitive module of cyclophilin 20â€3, 2â€cysteine peroxiredoxin and cysteine synthase integrates sulfur metabolism and oxylipin signaling in the high light acclimation response. Plant Journal, 2017, 91, 995-1014.	2.8	31
50	System analysis of metabolism and the transcriptome in <i>Arabidopsis thaliana</i> roots reveals differential coâ€regulation upon iron, sulfur and potassium deficiency. Plant, Cell and Environment, 2017, 40, 95-107.	2.8	104
51	Nuclear Localised MORE SULPHUR ACCUMULATION1 Epigenetically Regulates Sulphur Homeostasis in Arabidopsis thaliana. PLoS Genetics, 2016, 12, e1006298.	1.5	81
52	Extensive Regulation of Diurnal Transcription and Metabolism by Glucocorticoids. PLoS Genetics, 2016, 12, e1006512.	1.5	44
53	ROS-Mediated Inhibition of S-nitrosoglutathione Reductase Contributes to the Activation of Anti-oxidative Mechanisms. Frontiers in Plant Science, 2016, 7, 1669.	1.7	56
54	Ectopically expressed glutaredoxin ROXY19 negatively regulates the detoxification pathway in Arabidopsis thaliana. BMC Plant Biology, 2016, 16, 200.	1.6	30

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55	<scp>MSL</scp>1 is a mechanosensitive ion channel that dissipates mitochondrial membrane potential and maintains redox homeostasis in mitochondria during abiotic stress. Plant Journal, 2016, 88, 809-825.	2.8	82
56	Drought stress in maize causes differential acclimation responses of glutathione and sulfur metabolism in leaves and roots. BMC Plant Biology, 2016, 16, 247.	1.6	92
57	MTHFD1 controls DNA methylation in Arabidopsis. Nature Communications, 2016, 7, 11640.	5.8	61
58	Integration of light and metabolic signals for stem cell activation at the shoot apical meristem. ELife, 2016, 5, .	2.8	158
59	Molecular identification and functional characterization of the first NÎ±â€acetyltransferase in plastids by global acetylome profiling. Proteomics, 2015, 15, 2426-2435.	1.3	92
60	Two N-Terminal Acetyltransferases Antagonistically Regulate the Stability of a Nod-Like Receptor in Arabidopsis. Plant Cell, 2015, 27, 1547-1562.	3.1	102
61	The Role of Compartment-Specific Cysteine Synthesis for Sulfur Homeostasis During H2S Exposure in Arabidopsis. Plant and Cell Physiology, 2015, 56, 358-367.	1.5	56
62	Sulfide Detoxification in Plant Mitochondria. Methods in Enzymology, 2015, 555, 271-286.	0.4	10
63	Characterization of the serine acetyltransferase gene family of Vitis vinifera uncovers differences in regulation of OAS synthesis in woody plants. Frontiers in Plant Science, 2015, 6, 74.	1.7	19
64	Mitochondrial Dihydrolipoyl Dehydrogenase Activity Shapes Photosynthesis and Photorespiration of <i>Arabidopsis thaliana</i>. Plant Cell, 2015, 27, 1968-1984.	3.1	139
65	Thiol switches in redox regulation of chloroplasts: balancing redox state, metabolism and oxidative stress. Biological Chemistry, 2015, 396, 483-494.	1.2	40
66	Downregulation of N-terminal acetylation triggers ABA-mediated drought responses in Arabidopsis. Nature Communications, 2015, 6, 7640.	5.8	119
67	Relation between chemotaxis and consumption of amino acids in bacteria. Molecular Microbiology, 2015, 96, 1272-1282.	1.2	121
68	Editorial: Frontiers of Sulfur Metabolism in Plant Growth, Development, and Stress Response. Frontiers in Plant Science, 2015, 6, 1220.	1.7	38
69	Diversity and regulation of ATP sulfurylase in photosynthetic organisms. Frontiers in Plant Science, 2014, 5, 597.	1.7	52
70	Applied Cell Biology of Sulphur and Selenium in Plants. Plant Cell Monographs, 2014, , 247-272.	0.4	2
71	The Mitochondrial Sulfur Dioxygenase ETHYLMALONIC ENCEPHALOPATHY PROTEIN1 Is Required for Amino Acid Catabolism during Carbohydrate Starvation and Embryo Development in Arabidopsis Â Â. Plant Physiology, 2014, 165, 92-104.	2.3	57
72	Evidence for Several Cysteine Transport Mechanisms in the Mitochondrial Membranes of Arabidopsis thaliana. Plant and Cell Physiology, 2014, 55, 64-73.	1.5	28

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73	Sulfate availability affects <scp>ABA</scp> levels and germination response to <scp>ABA</scp> and salt stress in <i><scp>A</scp>rabidopsis thaliana</i>. Plant Journal, 2014, 77, 604-615.	2.8	143
74	Redesign of Genetically Encoded Biosensors for Monitoring Mitochondrial Redox Status in a Broad Range of Model Eukaryotes. Journal of Biomolecular Screening, 2014, 19, 379-386.	2.6	73
75	Metabolic transformations in breast cancer subtypes. Cancer & Metabolism, 2014, 2, .	2.4	3
76	Affinity Purification of O-Acetylserine(thiol)lyase from Chlorella sorokiniana by Recombinant Proteins from Arabidopsis thaliana. Metabolites, 2014, 4, 629-639.	1.3	15
77	The significance of cysteine synthesis for acclimation to high light conditions. Frontiers in Plant Science, 2014, 5, 776.	1.7	20
78	Micronutrient Use Efficiency â€" Cell Biology of Iron and Its Metabolic Interactions in Plants. Plant Ecophysiology, 2014, , 133-152.	1.5	3
79	<scp>SULTR</scp>3;1 is a chloroplastâ€localized sulfate transporter in <i>Arabidopsis thaliana</i>. Plant Journal, 2013, 73, 607-616.	2.8	146
80	Methionine salvage and <i>S</i>-adenosylmethionine: essential links between sulfur, ethylene and polyamine biosynthesis. Biochemical Journal, 2013, 451, 145-154.	1.7	298
81	Successful Fertilization Requires the Presence of at Least One Major O-Acetylserine(thiol)lyase for Cysteine Synthesis in Pollen of Arabidopsis. Plant Physiology, 2013, 163, 959-972.	2.3	30
82	Toward new perspectives on the interaction of iron and sulfur metabolism in plants. Frontiers in Plant Science, 2013, 4, 357.	1.7	79
83	Cysteine biosynthesis, in concert with a novel mechanism, contributes to sulfide detoxification in mitochondria of Arabidopsis thaliana. Biochemical Journal, 2012, 445, 275-283.	1.7	43
84	Recycling of Methylthioadenosine Is Essential for Normal Vascular Development and Reproduction in Arabidopsis Â Â. Plant Physiology, 2012, 158, 1728-1744.	2.3	35
85	Subcellular Compartmentation of Cysteine Synthesis in Plants â€" One Step More. , 2012, , 71-75.		0
86	Mitochondrial Cysteine Synthase Complex Regulates O-Acetylserine Biosynthesis in Plants. Journal of Biological Chemistry, 2012, 287, 27941-27947.	1.6	64
87	Vacuolar Nicotianamine Has Critical and Distinct Roles under Iron Deficiency and for Zinc Sequestration in <i>Arabidopsis</i>. Plant Cell, 2012, 24, 724-737.	3.1	277
88	Improved sulfur nutrition provides the basis for enhanced production of sulfur-containing defense compounds in Arabidopsis thaliana upon inoculation with Alternaria brassicicola. Journal of Plant Physiology, 2012, 169, 740-743.	1.6	17
89	Transcriptome profiling of genes differentially modulated by sulfur and chromium identifies potential targets for phytoremediation and reveals a complex Sâ€"Cr interplay on sulfate transport regulation in B. juncea. Journal of Hazardous Materials, 2012, 239-240, 192-205.	6.5	36
90	Targeted Systems Biology Profiling of Tomato Fruit Reveals Coordination of the Yang Cycle and a Distinct Regulation of Ethylene Biosynthesis during Postclimacteric Ripening Â Â Â. Plant Physiology, 2012, 160, 1498-1514.	2.3	104

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91	Molecular Evolution of the Genomic RNA of Apple Stem Grooving Capillovirus. Journal of Molecular Evolution, 2012, 75, 92-101.	0.8	12
92	Effects of fou8/fry1 Mutation on Sulfur Metabolism: Is Decreased Internal Sulfate the Trigger of Sulfate Starvation Response?. PLoS ONE, 2012, 7, e39425.	1.1	57
93	The relevance of compartmentation for cysteine synthesis in phototrophic organisms. Protoplasma, 2012, 249, 147-155.	1.0	22
94	Selenate and molybdate alter sulfate transport and assimilation in Brassica juncea L. Czern.: Implications for phytoremediation. Environmental and Experimental Botany, 2012, 75, 41-51.	2.0	64
95	Allosterically Gated Enzyme Dynamics in the Cysteine Synthase Complex Regulate Cysteine Biosynthesis in Arabidopsis thaliana. Structure, 2012, 20, 292-302.	1.6	29
96	Cysteine Synthesis in the Chloroplast Is Not Required for Resistance of Arabidopsis thaliana to H2S Fumigation. , 2012, , 217-221.		0
97	The Role of Cyclophilin CYP20-3 in Activation of Chloroplast Serine Acetyltransferase Under High Light Stress. , 2012, , 265-269.		0
98	Evidence for a SAL1-PAP Chloroplast Retrograde Pathway That Functions in Drought and High Light Signaling in <i>Arabidopsis</i> Â Â Â. Plant Cell, 2011, 23, 3992-4012.	3.1	473
99	Sulfur Assimilation in Photosynthetic Organisms: Molecular Functions and Regulations of Transporters and Assimilatory Enzymes. Annual Review of Plant Biology, 2011, 62, 157-184.	8.6	720
100	Generation of Seâ€fortified broccoli as functional food: impact of Se fertilization on S metabolism. Plant, Cell and Environment, 2011, 34, 192-207.	2.8	59
101	Molecular Biology, Biochemistry and Cellular Physiology of Cysteine Metabolism inArabidopsis thaliana. The Arabidopsis Book, 2011, 9, e0154.	0.5	98
102	Plant homologs of the <i>Plasmodium falciparum</i> chloroquine-resistance transporter, <i>Pf</i> CRT, are required for glutathione homeostasis and stress responses. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 2331-2336.	3.3	164
103	Enzymes of cysteine synthesis show extensive and conserved modifications patterns that include NÎ±-terminal acetylation. Amino Acids, 2010, 39, 1077-1086.	1.2	22
104	Sultr4;1 mutant seeds of Arabidopsis have an enhanced sulphate content and modified proteome suggesting metabolic adaptations to altered sulphate compartmentalization. BMC Plant Biology, 2010, 10, 78.	1.6	37
105	Inhibition of 5â€™-methylthioadenosine metabolism in the Yang cycle alters polyamine levels, and impairs seedling growth and reproduction in Arabidopsis. Plant Journal, 2010, 62, no-no.	2.8	47
106	The Seed Composition of Arabidopsis Mutants for the Group 3 Sulfate Transporters Indicates a Role in Sulfate Translocation within Developing Seeds. Plant Physiology, 2010, 154, 913-926.	2.3	61
107	Sulfite Reductase Defines a Newly Discovered Bottleneck for Assimilatory Sulfate Reduction and Is Essential for Growth and Development in <i>Arabidopsis thaliana</i> Â Â. Plant Cell, 2010, 22, 1216-1231.	3.1	163
108	Overexpression of serine acetlytransferase produced large increases in O-acetylserine and free cysteine in developing seeds of a grain legume. Journal of Experimental Botany, 2010, 61, 721-733.	2.4	62

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109	Structure and Function of the Hetero-oligomeric Cysteine Synthase Complex in Plants*. Journal of Biological Chemistry, 2010, 285, 32810-32817.	1.6	76
110	Cellular Biology of Sulfur and Its Functions in Plants. Plant Cell Monographs, 2010, , 243-279.	0.4	11
111	Expression Profiling of Tobacco Leaf Trichomes Identifies Genes for Biotic and Abiotic Stresses. Plant and Cell Physiology, 2010, 51, 1627-1637.	1.5	130
112	The Analysis of Arabidopsis Nicotianamine Synthase Mutants Reveals Functions for Nicotianamine in Seed Iron Loading and Iron Deficiency Responses Â Â Â. Plant Physiology, 2009, 150, 257-271.	2.3	240
113	Dynamic Plastid Redox Signals Integrate Gene Expression and Metabolism to Induce Distinct Metabolic States in Photosynthetic Acclimation in<i>Arabidopsis</i>Â. Plant Cell, 2009, 21, 2715-2732.	3.1	176
114	Disruption of Adenosine-5â€²-Phosphosulfate Kinase in<i>Arabidopsis</i>Reduces Levels of Sulfated Secondary Metabolites. Plant Cell, 2009, 21, 910-927.	3.1	180
115	SAM levels, gene expression of SAM synthetase, methionine synthase and ACC oxidase, and ethylene emission from N. suaveolens flowers. Plant Molecular Biology, 2009, 70, 535-546.	2.0	58
116	The NADPH-dependent thioredoxin system constitutes a functional backup for cytosolic glutathione reductase in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9109-9114.	3.3	259
117	A Mechanistic Model of the Cysteine Synthase Complex. Journal of Molecular Biology, 2009, 386, 37-59.	2.0	73
118	Restricting glutathione biosynthesis to the cytosol is sufficient for normal plant development. Plant Journal, 2008, 53, 999-1012.	2.8	158
119	Confocal imaging of glutathione redox potential in living plant cells. Journal of Microscopy, 2008, 231, 299-316.	0.8	279
120	Metabolism of Cysteine in Plants and Phototrophic Bacteria. Advances in Photosynthesis and Respiration, 2008, , 59-91.	1.0	17
121	Analysis of the <i>Arabidopsis O</i>-Acetylserine(thiol)lyase Gene Family Demonstrates Compartment-Specific Differences in the Regulation of Cysteine Synthesis. Plant Cell, 2008, 20, 168-185.	3.1	206
122	Differential Regulation of the Expression of Two High-Affinity Sulfate Transporters, SULTR1.1 and SULTR1.2, in Arabidopsis Â Â. Plant Physiology, 2008, 147, 897-911.	2.3	153
123	Mitochondrial Serine Acetyltransferase Functions as a Pacemaker of Cysteine Synthesis in Plant Cells Â Â. Plant Physiology, 2008, 148, 1055-1067.	2.3	121
124	Interactions between Chromium and Sulfur Metabolism in<i>Brassica juncea</i>. Journal of Environmental Quality, 2008, 37, 1536-1545.	1.0	90
125	OsMTN encodes a 5â€²-methylthioadenosine nucleosidase that is up-regulated during submergence-induced ethylene synthesis in rice (Oryza sativa L.). Journal of Experimental Botany, 2007, 58, 1505-1514.	2.4	40
126	Dominant-Negative Modification Reveals the Regulatory Function of the Multimeric Cysteine Synthase Protein Complex in Transgenic Tobacco. Plant Cell, 2007, 19, 625-639.	3.1	94

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127	Î³-Glutamyl transpeptidase GGT4 initiates vacuolar degradation of glutathioneS-conjugates inArabidopsis. FEBS Letters, 2007, 581, 3131-3138.	1.3	102
128	Sulphite oxidase as key enzyme for protecting plants against sulphur dioxide. Plant, Cell and Environment, 2007, 30, 447-455.	2.8	94
129	The role of methionine recycling for ethylene synthesis in Arabidopsis. Plant Journal, 2007, 49, 238-249.	2.8	124
130	Redoxâ€sensitive GFP in <i>Arabidopsis thaliana</i> is a quantitative biosensor for the redox potential of the cellular glutathione redox buffer. Plant Journal, 2007, 52, 973-986.	2.8	420
131	Sulfurâ€Enhanced Defence: Effects of Sulfur Metabolism, Nitrogen Supply, and Pathogen Lifestyle. Plant Biology, 2007, 9, 608-619.	1.8	69
132	Chromate Differentially Affects the Expression of a Highâ€Affinity Sulfate Transporter and Isoforms of Components of the Sulfate Assimilatory Pathway in <i>Zea mays</i> (L.). Plant Biology, 2007, 9, 662-671.	1.8	34
133	Sulfur in biotic interactions of plants. Plant Ecophysiology, 2007, , 197-224.	1.5	9
134	Vacuolar sequestration of glutathioneS-conjugates outcompetes a possible degradation of the glutathione moiety by phytochelatin synthase. FEBS Letters, 2006, 580, 6384-6390.	1.3	61
135	Functional analysis of the cysteine synthase protein complex from plants: Structural, biochemical and regulatory properties. Journal of Plant Physiology, 2006, 163, 273-286.	1.6	184
136	Sulfur and phytoplankton: acquisition, metabolism and impact on the environment. New Phytologist, 2005, 166, 371-382.	3.5	119
137	Ectopic expression of nicotianamine synthase genes results in improved iron accumulation and increased nickel tolerance in transgenic tobacco. Plant, Cell and Environment, 2005, 28, 365-374.	2.8	138
138	Expression profiling of metabolic genes in response to methyl jasmonate reveals regulation of genes of primary and secondary sulfur-related pathways in Arabidopsis thaliana. Photosynthesis Research, 2005, 86, 491-508.	1.6	111
139	Glutathione homeostasis and redox-regulation by sulfhydryl groups. Photosynthesis Research, 2005, 86, 435-457.	1.6	209
140	Retrograde Plastid Redox Signals in the Expression of Nuclear Genes for Chloroplast Proteins of Arabidopsis thaliana. Journal of Biological Chemistry, 2005, 280, 5318-5328.	1.6	203
141	Characterization and Expression Analysis of a Serine Acetyltransferase Gene Family Involved in a Key Step of the Sulfur Assimilation Pathway in Arabidopsis. Plant Physiology, 2005, 137, 220-230.	2.3	127
142	Regulation of Sulfate Uptake and Expression of Sulfate Transporter Genes in Brassica oleracea as Affected by Atmospheric H2S and Pedospheric Sulfate Nutrition. Plant Physiology, 2004, 136, 3396-3408.	2.3	191
143	Analysis of Sequence, Map Position, and Gene Expression Reveals Conserved Essential Genes for Iron Uptake in Arabidopsis and Tomato. Plant Physiology, 2004, 136, 4169-4183.	2.3	80
144	O-acetylserine (thiol) lyase: an enigmatic enzyme of plant cysteine biosynthesis revisited in Arabidopsis thaliana. Journal of Experimental Botany, 2004, 55, 1785-1798.	2.4	176

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145	Regulation of sulphate assimilation by glutathione in poplars (Populus tremulaxP. alba) of wild type and overexpressing Â-glutamylcysteine synthetase in the cytosol. Journal of Experimental Botany, 2004, 55, 837-845.	2.4	66
146	Iron uptake, trafficking and homeostasis in plants. Planta, 2003, 216, 541-551.	1.6	546
147	Production of cysteine for bacterial and plant biotechnology: Application of cysteine feedback-insensitive isoforms of serine acetyltransferase. Amino Acids, 2003, 24, 195-203.	1.2	88
148	Synthesis and proof-of-function of a [14 C]-labelled form of the plant iron chelator nicotianamine using recombinant nicotianamine synthase from barley. Physiologia Plantarum, 2003, 118, 430-438.	2.6	6
149	Use of Biomolecular Interaction Analysis to Elucidate the Regulatory Mechanism of the Cysteine Synthase Complex fromArabidopsis thaliana. Journal of Biological Chemistry, 2002, 277, 30629-30634.	1.6	97
150	A Metal-binding Member of the Late Embryogenesis Abundant Protein Family Transports Iron in the Phloem ofRicinus communis L.. Journal of Biological Chemistry, 2002, 277, 25062-25069.	1.6	209
151	Molecular and biochemical analysis of the enzymes of cysteine biosynthesis in the plant Arabidopsis thaliana. Amino Acids, 2002, 22, 245-257.	1.2	103
152	The cysteine synthase complex from plants. FEBS Journal, 2001, 268, 686-693.	0.2	106
153	Plant concepts for mineral acquisition and allocation. Current Opinion in Biotechnology, 2001, 12, 161-168.	3.3	99
154	Strategies for the Allocation of Resources under Sulfur Limitation in the Green Alga Dunaliella salina. Plant Physiology, 2000, 124, 857-864.	2.3	91
155	Genomic and functional characterization of the oas gene family encoding O-acetylserine (thiol) lyases, enzymes catalyzing the final step in cysteine biosynthesis in Arabidopsis thaliana. Gene, 2000, 253, 237-247.	1.0	125
156	Isolation and characterization of a gene for assimilatory sulfite reductase from Arabidopsis thaliana. Gene, 1998, 212, 147-153.	1.0	68
157	Molecular physiology of plant sulfur metabolism. Planta, 1997, 202, 138-148.	1.6	303
158	Cysteine synthesis in plants: protein-protein interactions of serine acetyltransferase from Arabidopsis thaliana. Plant Journal, 1997, 11, 251-262.	2.8	142
159	Cysteine biosynthesis in plants: isolation and functional identification of a cDNA encoding a serine acetyltransferase fromArabidopsis thaliana. FEBS Letters, 1995, 358, 43-47.	1.3	38
160	Isolation and characterization of two cDNAs encoding for compartment specific isoforms ofO-acetylserine (thiol) lyase fromArabidopsis thaliana. FEBS Letters, 1994, 351, 257-262.	1.3	75
161	Î³-Glutamylcysteine synthetase in higher plants: catalytic properties and subcellular localization. Planta, 1990, 180, 603-612.	1.6	236
162	Glutathione synthetase in tobacco suspension cultures: catalytic properties and localization. Physiologia Plantarum, 1988, 72, 70-76.	2.6	100

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163	Discriminative Long-Distance Transport of Selenate and Selenite Triggers Glutathione Oxidation in Specific Subcellular Compartments of Root and Shoot Cells in Arabidopsis. Frontiers in Plant Science, 0, 13, .	1.7	1