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List of Publications by Year
in descending order

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255	19,000	7568	16650
papers	citations	77 h-index	123 g-index

262	262	262	15143
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	PYRIMIDINE AND PURINE BIOSYNTHESIS AND DEGRADATION IN PLANTS. Annual Review of Plant Biology, 2006, 57, 805-836.	18.7	492
2	Evidence of the crucial role of sucrose synthase for sink strength using transgenic potato plants (Solanum tuberosum L.). Plant Journal, 1995, 7, 97-107.	5.7	482
3	Simultaneous Application of Heat, Drought, and Virus to Arabidopsis Plants Reveals Significant Shifts in Signaling Networks. Plant Physiology, 2013, 162, 1849-1866.	4.8	446
4	The Stomatal Response to Reduced Relative Humidity Requires Guard Cell-Autonomous ABA Synthesis. Current Biology, 2013, 23, 53-57.	3.9	415
5	Both developmental and metabolic signals activate the promoter of a class I patatin gene. EMBO Journal, 1989, 8, 23-29.	7.8	370
6	Reprogramming a maize plant: transcriptional and metabolic changes induced by the fungal biotroph Ustilago maydis. Plant Journal, 2008, 56, 181-195.	5.7	328
7	A Small Decrease of Plastid Transketolase Activity in Antisense Tobacco Transformants Has Dramatic Effects on Photosynthesis and Phenylpropanoid Metabolism. Plant Cell, 2001, 13, 535-551.	6.6	304
8	Impact of Altered Gibberellin Metabolism on Biomass Accumulation, Lignin Biosynthesis, and Photosynthesis in Transgenic Tobacco Plants. Plant Physiology, 2004, 135, 254-265.	4.8	286
9	One of two different ADP-glucose pyrophosphorylase genes from potato responds strongly to elevated levels of sucrose. Molecular Genetics and Genomics, 1990, 224, 136-146.	2.4	259
10	An ethanol inducible gene switch for plants used to manipulate carbon metabolism. Nature Biotechnology, 1998, 16, 177-180.	17.5	251
11	Specific Roles of Î±- and Î³-Tocopherol in Abiotic Stress Responses of Transgenic Tobacco. Plant Physiology, 2007, 143, 1720-1738.	4.8	236
12	A moderate decrease of plastid aldolase activity inhibits photosynthesis, alters the levels of sugars and starch, and inhibits growth of potato plants. Plant Journal, 1998, 14, 147-157.	5.7	233
13	Transgenic tobacco plants expressing yeast-derived invertase in either the cytosol, vacuole or apoplast: a powerful tool for studying sucrose metabolism and sink/source interactions. Plant Journal, 1991, 1, 95-106.	5.7	230
14	The nitrate and ammonium nitrate supply have a major influence on the response of photosynthesis, carbon metabolism, nitrogen metabolism and growth to elevated carbon dioxide in tobacco. Plant, Cell and Environment, 1999, 22, 1177-1199.	5.7	221
15	Regulation of Metabolism in Transgenic Plants. Annual Review of Plant Biology, 1995, 46, 341-368.	14.3	219
16	Differences and commonalities of plant responses to single and combined stresses. Plant Journal, 2017, 90, 839-855.	5.7	206
17	Inorganic pyrophosphate content and metabolites in potato and tobacco plants expressing E. coli pyrophosphatase in their cytosol. Planta, 1992, 188, 238-244.	3.2	205
18	Increased potato tuber size resulting from apoplastic expression of a yeast invertase. Nature Biotechnology, 1997, 15, 794-797.	17.5	197

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19	Combined expression of glucokinase and invertase in potato tubers leads to a dramatic reduction in starch accumulation and a stimulation of glycolysis. Plant Journal, 1998, 15, 109-118.	5.7	192
20	Ectopic expression of a tobacco invertase inhibitor homolog prevents cold-induced sweetening of potato tubers. Nature Biotechnology, 1999, 17, 708-711.	17.5	189
21	Manipulation of plant innate immunity and gibberellin as factor of compatibility in the mutualistic association of barley roots with Piriformospora indica. Plant Journal, 2009, 59, 461-474.	5.7	183
22	Production of Human Papillomavirus Type 16 Virus-Like Particles in Transgenic Plants. Journal of Virology, 2003, 77, 9211-9220.	3.4	176
23	Soluble acid invertase determines the hexose-to-sucrose ratio in cold-stored potato tubers. Planta, 1996, 198, 246-52.	3.2	173
24	Companion cell-specific inhibition of the potato sucrose transporter SUT1. Plant, Cell and Environment, 1996, 19, 1115-1123.	5.7	172
25	Maize Source Leaf Adaptation to Nitrogen Deficiency Affects Not Only Nitrogen and Carbon Metabolism But Also Control of Phosphate Homeostasis Â Â. Plant Physiology, 2012, 160, 1384-1406.	4.8	170
26	Regulation of potato tuber sprouting. Planta, 2014, 239, 27-38.	3.2	170
27	Systems Analysis of a Maize Leaf Developmental Gradient Redefines the Current C4 Model and Provides Candidates for Regulation Â. Plant Cell, 2011, 23, 4208-4220.	6.6	165
28	Cell Wall-Bound Invertase Limits Sucrose Export and Is Involved in Symptom Development and Inhibition of Photosynthesis during Compatible Interaction between Tomato andXanthomonas campestrispvvesicatoriaÂ Â. Plant Physiology, 2008, 148, 1523-1536.	4.8	158
29	RNAi-Mediated Tocopherol Deficiency Impairs Photoassimilate Export in Transgenic Potato Plants. Plant Physiology, 2004, 135, 1256-1268.	4.8	157
30	Apoplastic Expression of Yeast-Derived Invertase in Potato. Plant Physiology, 1992, 100, 301-308.	4.8	155
31	Reduction of the chloroplastic fructose-1,6-bisphosphatase in transgenic potato plants impairs photosynthesis and plant growth. Plant Journal, 1994, 6, 637-650.	5.7	155
32	Enhanced carbon dioxide leads to a modified diurnal rhythm of nitrate reductase activity in older plants, and a large stimulation of nitrate reductase activity and higher levels of amino acids in young tobacco plants. Plant, Cell and Environment, 1998, 21, 253-268.	5.7	154
33	Signaling events in plants: Stress factors in combination change the picture. Environmental and Experimental Botany, 2015, 114, 4-14.	4.2	151
34	Growth at elevated CO2 concentrations leads to modified profiles of secondary metabolites in tobacco cv. SamsunNN and to increased resistance against infection with potato virus Y. Plant, Cell and Environment, 2006, 29, 126-137.	5.7	148
35	Reactivation of Meristem Activity and Sprout Growth in Potato Tubers Require Both Cytokinin and Gibberellin Â Â Â. Plant Physiology, 2011, 155, 776-796.	4.8	143
36	Spinach hexokinase I is located in the outer envelope membrane of plastids. FEBS Letters, 1999, 461, 13-18.	2.8	139

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37	Altering Trehalose-6-Phosphate Content in Transgenic Potato Tubers Affects Tuber Growth and Alters Responsiveness to Hormones during Sprouting Â Â. Plant Physiology, 2011, 156, 1754-1771.	4.8	138
38	Source-Sink Regulation Is Mediated by Interaction of an FT Homolog with a SWEET Protein in Potato. Current Biology, 2019, 29, 1178-1186.e6.	3.9	137
39	Analysis of the expression of potato uridinediphosphate-glucose pyrophosphorylase and its inhibition by antisense RNA. Planta, 1993, 190, 247-52.	3.2	133
40	Regulation of carbohydrate partitioning during the interaction of potato virus Y with tobacco. Molecular Plant Pathology, 2000, 1, 51-59.	4.2	128
41	HSP70 and Its Cochaperone CPIP Promote Potyvirus Infection in Nicotiana benthamiana by Regulating Viral Coat Protein Functions. Plant Cell, 2010, 22, 523-535.	6.6	125
42	Molecular analysis of carbon partitioning in solanaceous species. Journal of Experimental Botany, 1995, 46, 587-607.	4.8	124
43	Small changes in the activity of chloroplastic NADP+-dependent ferredoxin oxidoreductase lead to impaired plant growth and restrict photosynthetic activity of transgenic tobacco plants. Plant Journal, 2002, 29, 281-293.	5.7	124
44	Capsid Protein-Mediated Recruitment of Host DnaJ-Like Proteins Is Required for Potato Virus Y Infection in Tobacco Plants. Journal of Virology, 2007, 81, 11870-11880.	3.4	123
45	Expression of E. coli inorganic pyrophosphatase in transgenic plants alters photoassimilate partitioning.. Plant Journal, 1992, 2, 571-581.	5.7	122
46	Next-generation strategies for understanding and influencing sourceâ€“sink relations in crop plants. Current Opinion in Plant Biology, 2018, 43, 63-70.	7.1	119
47	Salicylic acid-independent induction of pathogenesis-related protein transcripts by sugars is dependent on leaf developmental stage. FEBS Letters, 1996, 397, 239-244.	2.8	116
48	Cloning and expression analysis of a potato cDNA that encodes branching enzyme evidence for co-expression of starch biosynthetic genes. Molecular Genetics and Genomics, 1991, 230, 39-44.	2.4	115
49	Genes driving potato tuber initiation and growth: identification based on transcriptional changes using the POCI array. Functional and Integrative Genomics, 2008, 8, 329-340.	3.5	114
50	Transcriptome and metabolome profiling of field-grown transgenic barley lack induced differences but show cultivar-specific variances. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 6198-6203.	7.1	114
51	Overexpression of pyrophosphatase leads to increased sucrose degradation and starch synthesis, increased activities of enzymes for sucrose-starch interconversions, and increased levels of nucleotides in growing potato tubers. Planta, 1998, 205, 428-437.	3.2	113
52	Control of potato tuber sprouting. Trends in Plant Science, 2001, 6, 333-335.	8.8	111
53	Plantâ€“microbe interactions to probe regulation of plant carbon metabolism. Journal of Plant Physiology, 2006, 163, 307-318.	3.5	110
54	Phloem-specific expression of pyrophosphatase inhibits long distance transport of carbohydrates and amino acids in tobacco plants. Plant, Cell and Environment, 1996, 19, 43-55.	5.7	109

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55	Metabolite profiling of barley flag leaves under drought and combined heat and drought stress reveals metabolic QTLs for metabolites associated with antioxidant defense. Journal of Experimental Botany, 2017, 68, 1697-1713.	4.8	109
56	Accumulation of hexoses in leaf vacuoles: Studies with transgenic tobacco plants expressing yeast-derived invertase in the cytosol, vacuole or apoplasm. Planta, 1994, 194, 29.	3.2	107
57	Impaired photoassimilate partitioning caused by phloem-specific removal of pyrophosphate can be complemented by a phloem-specific cytosolic yeast-derived invertase in transgenic plants.. Plant Cell, 1995, 7, 259-270.	6.6	107
58	Reduction of the cytosolic fructose-1,6-bisphosphatase in transgenic potato plants limits photosynthetic sucrose biosynthesis with no impact on plant growth and tuber yield. Plant Journal, 1996, 9, 671-681.	5.7	107
59	Synchronization of developmental, molecular and metabolic aspects of sourceâ€“sink interactions. Nature Plants, 2020, 6, 55-66.	9.3	107
60	Molecular determinants of sink strength. Current Opinion in Plant Biology, 1998, 1, 207-216.	7.1	106
61	A Thermostable Xylanase from Clostridium thermocellum Expressed at High Levels in the Apoplast of Transgenic Tobacco Has No Detrimental Effects and Is Easily Purified. Nature Biotechnology, 1995, 13, 63-66.	17.5	103
62	Design of tomato fruits with reduced allergenicity by dsRNAi-mediated inhibition of ns-LTP (Lyc e 3) expression. Plant Biotechnology Journal, 2006, 4, 231-242.	8.3	102
63	AtHsp70â€15â€deficient Arabidopsis plants are characterized by reduced growth, a constitutive cytosolic protein response and enhanced resistance to TuMV. Plant Journal, 2011, 66, 983-995.	5.7	101
64	Adaptation of maize source leaf metabolism to stress related disturbances in carbon, nitrogen and phosphorus balance. BMC Genomics, 2013, 14, 442.	2.8	100
65	Ustilago maydis Infection Strongly Alters Organic Nitrogen Allocation in Maize and Stimulates Productivity of Systemic Source Leaves Â Â. Plant Physiology, 2009, 152, 293-308.	4.8	98
66	Genome-wide analysis of starch metabolism genes in potato (Solanum tuberosum L.). BMC Genomics, 2017, 18, 37.	2.8	98
67	Vitamin E biosynthesis: biochemistry meets cell biology. Trends in Plant Science, 2003, 8, 6-8.	8.8	96
68	Temporal and spatial control of gene silencing in transgenic plants by inducible expression of double-stranded RNA. Plant Journal, 2003, 36, 731-740.	5.7	94
69	Systemic Acquired Resistance Mediated by the Ectopic Expression of Invertase: Possible Hexose Sensing in the Secretory Pathway. Plant Cell, 1996, 8, 793.	6.6	93
70	Decreased sucrose content triggers starch breakdown and respiration in stored potato tubers (Solanum tuberosum). Journal of Experimental Botany, 2003, 54, 477-488.	4.8	91
71	Molecular Approaches to Sink-Source Interactions. Plant Physiology, 1992, 99, 1267-1270.	4.8	88
72	Impact of elevated cytosolic and apoplastic invertase activity on carbon metabolism during potato tuber development. Journal of Experimental Botany, 2000, 51, 439-445.	4.8	86

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73	Reduced allergenicity of tomato fruits harvested from Lyc e 1â€“silenced transgenic tomato plants. Journal of Allergy and Clinical Immunology, 2006, 118, 1176-1183.	2.9	86
74	High CO2 -mediated down-regulation of photosynthetic gene transcripts is caused by accelerated leaf senescence rather than sugar accumulation. FEBS Letters, 2000, 479, 19-24.	2.8	85
75	Decreased expression of sucrose phosphate synthase strongly inhibits the water stress-induced synthesis of sucrose in growing potato tubers. Plant Journal, 1999, 19, 119-129.	5.7	84
76	Sugar Accumulation in Leaves of Arabidopsis sweet11/sweet12 Double Mutants Enhances Priming of the Salicylic Acid-Mediated Defense Response. Frontiers in Plant Science, 2017, 8, 1378.	3.6	83
77	Starchesâ€”from current models to genetic engineering. Plant Biotechnology Journal, 2013, 11, 223-232.	8.3	81
78	Expression of a luteoviral movement protein in transgenic plants leads to carbohydrate accumulation and reduced photosynthetic capacity in source leaves. Plant Journal, 1997, 12, 1045-1056.	5.7	80
79	Ectopic Expression of Constitutively Activated RACB in Barley Enhances Susceptibility to Powdery Mildew and Abiotic Stress. Plant Physiology, 2005, 139, 353-362.	4.8	80
80	Infection of maize leaves with Ustilago maydis prevents establishment of C4 photosynthesis. Journal of Plant Physiology, 2008, 165, 19-28.	3.5	80
81	Potato plants contain multiple forms of sucrose phosphate synthase, which differ in their tissue distributions, their levels during development, and their responses to low temperature. Plant, Cell and Environment, 1997, 20, 291-305.	5.7	79
82	Reconstitution of an active lactose carrier in vivo by simultaneous synthesis of two complementary protein fragments. Journal of Bacteriology, 1990, 172, 5374-5381.	2.2	78
83	Cloning and expression analysis of the plastidic fructose-1,6-bisphosphatase coding sequence from potato: circumstantial evidence for the import of hexoses into chloroplasts. Planta, 1992, 188, 7-12.	3.2	78
84	Manipulation of sink-source relations in transgenic plants. Plant, Cell and Environment, 1994, 17, 649-658.	5.7	78
85	Characterisation of the ATP-dependent phosphofructokinase gene family fromArabidopsis thaliana. FEBS Letters, 2007, 581, 2401-2410.	2.8	78
86	Evidence for expression level-dependent modulation of carbohydrate status and viral resistance by the potato leafroll virus movement protein in transgenic tobacco plants. Plant Journal, 2001, 28, 529-543.	5.7	77
87	Overexpression of a Cell Wall Enzyme Reduces Xyloglucan Depolymerization and Softening of Transgenic Tomato Fruits. Journal of Agricultural and Food Chemistry, 2010, 58, 5708-5713.	5.2	77
88	Tuber and Tuberous Root Development. Annual Review of Plant Biology, 2021, 72, 551-580.	18.7	77
89	Decreased sucrose-6-phosphate phosphatase level in transgenic tobacco inhibits photosynthesis, alters carbohydrate partitioning, and reduces growth. Planta, 2005, 221, 479-492.	3.2	76
90	Isolation and functional characterization of a novel plastidic hexokinase from Nicotiana tabacum. FEBS Letters, 2005, 579, 827-831.	2.8	75

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91	Intracellular Trafficking of Potato Leafroll VirusMovement Protein in Transgenic Arabidopsis. Traffic, 2007, 8, 1205-1214.	2.7	75
92	A second L-type isozyme of potato glucan phosphorylase: cloning, antisense inhibition and expression analysis. Plant Molecular Biology, 1995, 27, 567-576.	3.9	74
93	The role of transient starch in acclimation to elevated atmospheric CO2. FEBS Letters, 1998, 429, 147-151.	2.8	74
94	Loss of cytosolic fructoseâ€1,6â€bisphosphatase limits photosynthetic sucrose synthesis and causes severe growth retardations in rice (Oryza sativa). Plant, Cell and Environment, 2008, 31, 1851-1863.	5.7	73
95	Bioinspired Hybrid White Lightâ€Emitting Diodes. Advanced Materials, 2015, 27, 5493-5498.	21.0	72
96	Targeting and glycosylation of patatin the major potato tuber protein in leaves of transgenic tobacco. Planta, 1989, 179, 171-180.	3.2	71
97	Functional analysis of the essential bifunctional tobacco enzyme 3-dehydroquinate dehydratase/shikimate dehydrogenase in transgenic tobacco plants. Journal of Experimental Botany, 2007, 58, 2053-2067.	4.8	70
98	Flowering Time-Regulated Genes in Maize Include the Transcription Factor ZmMADS1. Plant Physiology, 2016, 172, 389-404.	4.8	70
99	Regulation of Arbuscular Mycorrhization by Carbon. The Symbiotic Interaction Cannot Be Improved by Increased Carbon Availability Accomplished by Root-Specifically Enhanced Invertase Activity. Plant Physiology, 2007, 143, 1827-1840.	4.8	67
100	Engineering of Metabolic Pathways by Artificial Enzyme Channels. Frontiers in Bioengineering and Biotechnology, 2015, 3, 168.	4.1	67
101	Xyloglucan endotransglucosylase and cell wall extensibility. Journal of Plant Physiology, 2011, 168, 196-203.	3.5	66
102	Regulation of Arbuscular Mycorrhization by Carbon. The Symbiotic Interaction Cannot Be Improved by Increased Carbon Availability Accomplished by Root-Specifically Enhanced Invertase Activity. Plant Physiology, 2007, 143, 1827-1840.	4.8	65
103	Simultaneous boosting of source and sink capacities doubles tuber starch yield of potato plants. Plant Biotechnology Journal, 2012, 10, 1088-1098.	8.3	65
104	Gene expression during tuber development in potato plants. FEBS Letters, 1990, 268, 334-338.	2.8	64
105	Solute accumulation and decreased photosynthesis in leaves of potato plants expressing yeast-derived invertase either in the apoplast, vacuole or cytosol. Planta, 1997, 202, 126-136.	3.2	64
106	A dual role of tobacco hexokinase 1 in primary metabolism and sugar sensing. Plant, Cell and Environment, 2013, 36, 1311-1327.	5.7	64
107	Comparative transcriptome analysis coupled to X-ray CT reveals sucrose supply and growth velocity as major determinants of potato tuber starch biosynthesis. BMC Genomics, 2010, 11, 93.	2.8	63
108	Amylases StAmy23, StBAM1 and StBAM9 regulate cold-induced sweetening of potato tubers in distinct ways. Journal of Experimental Botany, 2017, 68, 2317-2331.	4.8	62

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109	Sucrose synthase activity does not restrict glycolysis in roots of transgenic potato plants under hypoxic conditions. Planta, 1999, 210, 41-49.	3.2	60
110	Transgenic tobacco plants expressing antisense ferredoxin-NADP(H) reductase transcripts display increased susceptibility to photo-oxidative damage. Plant Journal, 2003, 35, 332-341.	5.7	60
111	Cloning and Characterization of the Gene Cluster for Palatinose Metabolism from the Phytopathogenic Bacterium Erwinia rhapontici. Journal of Bacteriology, 2001, 183, 2425-2430.	2.2	59
112	ÃŸ-amylase1 mutantArabidopsisplants show improved drought tolerance due to reduced starch breakdown in guard cells. Journal of Experimental Botany, 2015, 66, 6059-6067.	4.8	59
113	Sucrose metabolism in cold-stored potato tubers with decreased expression of sucrose phosphate synthase. Plant, Cell and Environment, 1998, 21, 285-299.	5.7	58
114	Transgenic Flavonoid Tomato Intake Reduces C-Reactive Protein in Human C-Reactive Protein Transgenic Mice More Than Wild-Type Tomato. Journal of Nutrition, 2006, 136, 2331-2337.	2.9	58
115	Choline transporterâ€like1 (<scp>CHER</scp>1) is crucial for plasmodesmata maturation in Arabidopsis thaliana. Plant Journal, 2017, 89, 394-406.	5.7	58
116	Post-transcriptional Regulation of FLOWERING LOCUS T Modulates Heat-Dependent Source-Sink Development in Potato. Current Biology, 2019, 29, 1614-1624.e3.	3.9	58
117	Ethanol Vapor Is an Efficient Inducer of the alc Gene Expression System in Model and Crop Plant Species. Plant Physiology, 2002, 129, 943-948.	4.8	57
118	Tocopherol deficiency in transgenic tobacco (Nicotiana tabacum L.) plants leads to accelerated senescence. Plant, Cell and Environment, 2009, 32, 144-157.	5.7	57
119	A simplified procedure for the subtractive cDNA cloning of photoassimilate-responding genes: isolation of cDNAs encoding a new class of pathogenesis-related proteins. Plant Molecular Biology, 1995, 29, 1027-1038.	3.9	56
120	Skin prick tests reveal stable and heritable reduction of allergenic potency of gene-silenced tomato fruits. Journal of Allergy and Clinical Immunology, 2006, 118, 711-718.	2.9	56
121	Target-based discovery of novel herbicides. Current Opinion in Plant Biology, 2004, 7, 219-225.	7.1	54
122	Regulation of Cell Wall-Bound Invertase in Pepper Leaves by Xanthomonas campestris pv. vesicatoria Type Three Effectors. PLoS ONE, 2012, 7, e51763.	2.5	54
123	The Arabidopsis DCP2 gene is required for proper mRNA turnover and prevents transgene silencing in Arabidopsis. Plant Journal, 2012, 72, 368-377.	5.7	53
124	An integrated functional approach to dissect systemic responses in maize to arbuscular mycorrhizal symbiosis. Plant, Cell and Environment, 2015, 38, 1591-1612.	5.7	53
125	Cloning and expression analysis of sucrose-phosphate synthase from sugar beet (Beta vulgaris L.). Molecular Genetics and Genomics, 1995, 247, 515-520.	2.4	52
126	Comparative analysis of abscisic acid content and starch degradation during storage of tubers harvested from different potato varieties. Potato Research, 2000, 43, 371-382.	2.7	52

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127	Strasburger â˜ Lehrbuch der Pflanzenwissenschaften. , 2014, , .		52
128	The stress granule component G3BP is a novel interaction partner for the nuclear shuttle proteins of the nanovirus pea necrotic yellow dwarf virus and geminivirus abutilon mosaic virus. Virus Research, 2017, 227, 6-14.	2.2	52
129	A truncated version of an ADP-glucose pyrophosphorylase promoter from potato specifies guard cell-selective expression in transgenic plants.. Plant Cell, 1994, 6, 601-612.	6.6	51
130	Deciphering source and sink responses of potato plants (<scp>Solanum tuberosum</scp> L.) to elevated temperatures. Plant, Cell and Environment, 2018, 41, 2600-2616.	5.7	51
131	Immunocytochemical localization of patatin, the major glycoprotein in potato (Solanum tuberosum) Tj ETQq1 1 0.784314 rgBT /Over	3.2	50
132	Molecular cloning, characterization and expression analysis of isoforms encoding tonoplast-bound proton-translocating inorganic pyrophosphatase in tobacco. Plant Molecular Biology, 1995, 29, 833-840.	3.9	49
133	Production of new/modified proteins in transgenic plants. Current Opinion in Biotechnology, 1999, 10, 163-168.	6.6	49
134	Improved Salt Tolerance of Transgenic Tobacco Expressing Apoplastic Yeast-Derived Invertase. Plant and Cell Physiology, 2001, 42, 245-249.	3.1	49
135	Identification of virulence genes in the corn pathogenColletotrichum graminicolabyAgrobacterium tumefaciensâ€mediated transformation. Molecular Plant Pathology, 2011, 12, 43-55.	4.2	49
136	Altered gene expression brought about by inter- and intracellularly formed hexoses and its possible implications for plant-pathogen interactions. Journal of Plant Research, 1998, 111, 323-328.	2.4	48
137	Expression of mutant patatin protein in transgenic tobacco plants: role of glycans and intracellular location.. Plant Cell, 1990, 2, 345-355.	6.6	47
138	Transgenic potato plants with strongly decreased expression of pyrophosphate:fructose-6-phosphate phosphotransferase show no visible phenotype and only minor changes in metabolic fluxes in their tubers. Planta, 1993, 192, 16.	3.2	47
139	OPTIMAS-DW: A comprehensive transcriptomics, metabolomics, ionomics, proteomics and phenomics data resource for maize. BMC Plant Biology, 2012, 12, 245.	3.6	47
140	Subtle Regulation of Potato Acid Invertase Activity by a Protein Complex of Invertase, Invertase Inhibitor, and SUCROSE NONFERMENTING1-RELATED PROTEIN KINASE. Plant Physiology, 2015, 168, 1807-1819.	4.8	47
141	Chloroplast Redox Status Modulates Genome-Wide Plant Responses during the Non-host Interaction of Tobacco with the Hemibiotrophic Bacterium Xanthomonas campestris pv. vesicatoria. Frontiers in Plant Science, 2017, 8, 1158.	3.6	47
142	Impaired Photoassimilate Partitioning Caused by Phloem-Specific Removal of Pyrophosphate Can Be Complemented by a Phloem-Specific Cytosolic Yeast-Derived Invertase in Transgenic Plants. Plant Cell, 1995, 7, 259.	6.6	46
143	2-Deoxyglucose resistance: a novel selection marker for plant transformation. Molecular Breeding, 2001, 7, 221-227.	2.1	46
144	In plants the alc gene expression system responds more rapidly following induction with acetaldehyde than with ethanol. FEBS Letters, 2003, 535, 136-140.	2.8	46

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145	Antisense inhibition of enolase strongly limits the metabolism of aromatic amino acids, but has only minor effects on respiration in leaves of transgenic tobacco plants. New Phytologist, 2009, 184, 607-618.	7.3	46
146	Comparative proteomic profiling of the choline transporterâ€like1 (<scp>CHER</scp>1) mutant provides insights into plasmodesmata composition of fully developed Arabidopsis thaliana leaves. Plant Journal, 2017, 92, 696-709.	5.7	45
147	Functional characterisation of Nicotiana tabacum xyloglucan endotransglycosylase (Nt XET-1): generation of transgenic tobacco plants and changes in cell wall xyloglucan. Planta, 2001, 212, 279-287.	3.2	44
148	Phytohormones in plant root-Piriformospora indicamutualism. Plant Signaling and Behavior, 2009, 4, 669-671.	2.4	44
149	Transgenic tobacco plants with strongly decreased expression of pyrophosphate: Fructose-6-phosphate 1-phosphotransferase do not differ significantly from wild type in photosynthate partitioning, plant growth or their ability to cope with limiting phosphate, limiting nitrogen and suboptimal temperatures. Planta, 1995, 196, 277.	3.2	43
150	Site-directed mutagenesis of serine 158 demonstrates its role in spinach leaf sucrose-phosphate synthase modulation. Plant Journal, 1999, 17, 407-413.	5.7	42
151	Molecular analysis of "de novo" purine biosynthesis in solanaceous species and in Arabidopsis Thaliana. Frontiers in Bioscience - Landmark, 2004, 9, 1803.	3.0	41
152	Temporally regulated expression of a yeast invertase in potato tubers allows dissection of the complex metabolic phenotype obtained following its constitutive expression. Plant Molecular Biology, 2004, 56, 91-110.	3.9	40
153	Symplasmic phloem unloading and radial post-phloem transport via vascular rays in tuberous roots of Manihot esculenta. Journal of Experimental Botany, 2019, 70, 5559-5573.	4.8	39
154	A transposon-based activation-tagging population inArabidopsis thaliana(TAMARA) and its application in the identification of dominant developmental and metabolic mutations. FEBS Letters, 2005, 579, 4622-4628.	2.8	38
155	The Ustilago maydis Nit2 Homolog Regulates Nitrogen Utilization and Is Required for Efficient Induction of Filamentous Growth. Eukaryotic Cell, 2012, 11, 368-380.	3.4	38
156	Transgenic tobacco plants expressing yeast-derived invertase in either the cytosol, vacuole or apoplast: a powerful tool for studying sucrose metabolism and sink/source interactions.. Plant Journal, 1991, 1, 95-106.	5.7	38
157	The genotypic variation of the antioxidant potential of different tomato varieties. Free Radical Research, 2005, 39, 1005-1016.	3.3	37
158	Potato tubers as bioreactors for palatinose production. Journal of Biotechnology, 2002, 96, 119-124.	3.8	36
159	Protein kinases responsible for the phosphorylation of the nuclear egress core complex of human cytomegalovirus. Journal of General Virology, 2017, 98, 2569-2581.	2.9	36
160	No need to shift the paradigm on the metabolic pathway to transitory starch in leaves. Trends in Plant Science, 2005, 10, 154-156.	8.8	35
161	Easy and versatile coating approach for long-living white hybrid light-emitting diodes. Materials Horizons, 2016, 3, 340-347.	12.2	35
162	Patterns of phenylpropanoids in non-inoculated and potato virus Y-inoculated leaves of transgenic tobacco plants expressing yeast-derived invertase. Phytochemistry, 2001, 56, 535-541.	2.9	34

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