Christopher R Somerville

List of Publications by Year
in descending order

222 papers	50,697 citations	764 119 h-index	1668 214 g-index
259 all docs	259 docs citations	259 times ranked	33642 citing authors

#	Article	IF	Citations
1	Analysis of the genome sequence of the flowering plant Arabidopsis thaliana. Nature, 2000, 408, 796-815.	13.7	8,336
2	Beneficial Biofuelsâ€"The Food, Energy, and Environment Trilemma. Science, 2009, 325, 270-271.	6.0	1,335
3	Visualization of Cellulose Synthase Demonstrates Functional Association with Microtubules. Science, 2006, 312, 1491-1495.	6.0	1,186
4	Toward a Systems Approach to Understanding Plant Cell Walls. Science, 2004, 306, 2206-2211.	6.0	1,090
5	Feedstocks for Lignocellulosic Biofuels. Science, 2010, 329, 790-792.	6.0	1,070
6	Insensitivity to Ethylene Conferred by a Dominant Mutation in Arabidopsis thaliana. Science, 1988, 241, 1086-1089.	6.0	950
7	Random GFP::cDNA fusions enable visualization of subcellular structures in cells of Arabidopsis at a high frequency. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 3718-3723.	3.3	916
8	Cellulose Synthesis in Higher Plants. Annual Review of Cell and Developmental Biology, 2006, 22, 53-78.	4.0	866
9	Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana. Nature, 1999, 402, 761-768.	13.7	724
10	Cellulosic Biofuels. Annual Review of Plant Biology, 2009, 60, 165-182.	8.6	669
11	Genes Galore: A Summary of Methods for Accessing Results from Large-Scale Partial Sequencing of Anonymous Arabidopsis cDNA Clones. Plant Physiology, 1994, 106, 1241-1255.	2.3	659
12	Gibberellin Is Required for Flowering in Arabidopsis thaliana under Short Days. Plant Physiology, 1992, 100, 403-408.	2.3	563
13	Identification of genes required for cellulose synthesis by regression analysis of public microarray data sets. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 8633-8638.	3.3	539
14	The Cellulose Synthase Superfamily. Plant Physiology, 2000, 124, 495-498.	2.3	518
15	Stomatal Development and Pattern Controlled by a MAPKK Kinase. Science, 2004, 304, 1494-1497.	6.0	516
16	Genetic evidence for three unique components in primary cell-wall cellulose synthase complexes in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15566-15571.	3.3	506
17	Alterations in Growth, Photosynthesis, and Respiration in a Starchless Mutant of Arabidopsis thaliana (L.) Deficient in Chloroplast Phosphoglucomutase Activity. Plant Physiology, 1985, 79, 11-17.	2.3	503
18	Identification and Characterization of the Arabidopsis PHO1 Gene Involved in Phosphate Loading to the Xylem. Plant Cell, 2002, 14, 889-902.	3.1	502

#	Article	IF	Citations
19	The Arabidopsis Information Resource (TAIR): a comprehensive database and web-based information retrieval, analysis, and visualization system for a model plant. Nucleic Acids Research, 2001, 29, 102-105.	6.5	497
20	The irregular xylem3 Locus of Arabidopsis Encodes a Cellulose Synthase Required for Secondary Cell Wall Synthesis. Plant Cell, 1999, 11, 769-779.	3.1	492
21	Glycerolipid Synthesis: Biochemistry and Regulation. Annual Review of Plant Biology, 1991, 42, 467-506.	14.2	489
22	Auxin-resistant mutants of Arabidopsis thaliana with an altered morphology. Molecular Genetics and Genomics, 1987, 206, 200-206.	2.4	482
23	Sulfonylurea-resistant mutants of Arabidopsis thaliana. Molecular Genetics and Genomics, 1986, 204, 430-434.	2.4	480
24	PICKLE is a CHD3 chromatin-remodeling factor that regulates the transition from embryonic to vegetative development in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 13839-13844.	3.3	468
25	Map-based cloning of a gene controlling omega-3 fatty acid desaturation in Arabidopsis. Science, 1992, 258, 1353-1355.	6.0	457
26	Plant Lipids: Metabolism, Mutants, and Membranes. Science, 1991, 252, 80-87.	6.0	454
27	The role of plant cell wall polysaccharide composition in disease resistance. Trends in Plant Science, 2004, 9, 203-209.	4.3	441
28	Fatty acid composition of leaf lipids determined after combined digestion and fatty acid methyl ester formation from fresh tissue. Analytical Biochemistry, 1986, 152, 141-145.	1.1	436
29	Mutant of Arabidopsis Deficient in Xylem Loading of Phosphate. Plant Physiology, 1991, 97, 1087-1093.	2.3	417
30	An Arabidopsis mutant defective in the general phenylpropanoid pathway.. Plant Cell, 1992, 4, 1413-1424.	3.1	412
31	Polyhydroxybutyrate, a Biodegradable Thermoplastic, Produced in Transgenic Plants. Science, 1992, 256, 520-523.	6.0	390
32	Modifications of cellulose synthase confer resistance to isoxaben and thiazolidinone herbicides in Arabidopsis Ixr1 mutants. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 10079-10084.	3.3	388
33	A MAPKK Kinase Gene Regulates Extra-Embryonic Cell Fate in Arabidopsis. Cell, 2004, 116, 109-119.	13.5	381
34	An oleate 12-hydroxylase from Ricinus communis L. is a fatty acyl desaturase homolog.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 6743-6747.	3.3	379
35	Real-Time Imaging of Cellulose Reorientation during Cell Wall Expansion in Arabidopsis Roots Â Â. Plant Physiology, 2010, 152, 787-796.	2.3	374
36	Discovery of Lignin in Seaweed Reveals Convergent Evolution of Cell-Wall Architecture. Current Biology, 2009, 19, 169-175.	1.8	371

#	Article	IF	Citations
37	The PEN1 Syntaxin Defines a Novel Cellular Compartment upon Fungal Attack and Is Required for the Timely Assembly of Papillae. Molecular Biology of the Cell, 2004, 15, 5118-5129.	0.9	359
38	Production of Polyhydroxyalkanoates, a Family of Biodegradable Plastics and Elastomers, in Bacteria and Plants. Nature Biotechnology, 1995, 13, 142-150.	9.4	342
39	Isolation and Characterization of a Starchless Mutant of Arabidopsis thaliana (L.) Heynh Lacking ADPglucose Pyrophosphorylase Activity. Plant Physiology, 1988, 86, 1131-1135.	2.3	332
40	Double stranded DNA sequencing as a choice for DNA sequencing. Nucleic Acids Research, 1988, 16, 1220-1220.	6.5	329
41	Cellular Differentiation Regulated by Gibberellin in theArabidopsis thaliana pickleMutant. Science, 1997, 277, 91-94.	6.0	327
42	Targeting of the polyhydroxybutyrate biosynthetic pathway to the plastids of Arabidopsis thaliana results in high levels of polymer accumulation.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 12760-12764.	3.3	312
43	Stearoyl-acyl-carrier-protein desaturase from higher plants is structurally unrelated to the animal and fungal homologs.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 2510-2514.	3.3	305
44	Development and application of a suite of polysaccharide-degrading enzymes for analyzing plant cell walls. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11417-11422.	3.3	300
45	Inhibition of photosynthesis in Arabidopsis mutants lacking leaf glutamate synthase activity. Nature, 1980, 286, 257-259.	13.7	292
46	Three Classes of Abscisic Acid (ABA)-Insensitive Mutations of Arabidopsis Define Genes that Control Overlapping Subsets of ABA Responses. Plant Physiology, 1990, 94, 1172-1179.	2.3	292
47	O-Glycosylated Cell Wall Proteins Are Essential in Root Hair Growth. Science, 2011, 332, 1401-1403.	6.0	287
48	Altered Growth and Cell Walls in a Fucose-Deficient Mutant of Arabidopsis. Science, 1993, 261, 1032-1035.	6.0	280
49	Transformation with a mutant Arabidopsis acetolactate synthase gene renders tobacco resistant to sulfonylurea herbicides. Molecular Genetics and Genomics, 1988, 211, 266-271.	2.4	278
50	Cloning of a Temperature-Regulated Gene Encoding a Chloroplast [omega]-3 Desaturase from Arabidopsis thaliana. Plant Physiology, 1994, 106, 1615-1621.	2.3	278
51	Cellulose synthase interactive protein 1 (CSI1) links microtubules and cellulose synthase complexes. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 185-190.	3.3	275
52	Tissue-Specific Expression of a Gene Encoding a Cell Wall-Localized Lipid Transfer Protein from Arabidopsis. Plant Physiology, 1994, 105, 35-45.	2.3	264
53	Mutants of Arabidopsis with alterations in seed lipid fatty acid composition. Theoretical and Applied Genetics, 1990, 80, 234-240.	1.8	262
54	Regulation of membrane fatty acid composition by temperature in mutants of Arabidopsis with alterations in membrane lipid composition. BMC Plant Biology, 2004, 4, 17.	1.6	261

#	Article	IF	Citations
55	Mutants of Arabidopsis thaliana with altered cell wall polysaccharide composition. Plant Journal, 1997, 12, 335-345.	2.8	256
56	Stearoyl-acyl carrier protein delta 9 desaturase from Ricinus communis is a diiron-oxo protein.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 2486-2490.	3.3	252
57	The Arabidopsis irregular xylem8 Mutant Is Deficient in Glucuronoxylan and Homogalacturonan, Which Are Essential for Secondary Cell Wall Integrity. Plant Cell, 2007, 19, 237-255.	3.1	251
58	Mutations in PMR5 result in powdery mildew resistance and altered cell wall composition. Plant Journal, 2004, 40, 968-978.	2.8	248
59	A highly repeated DNA sequence in Arabidopsis thaliana. Molecular Genetics and Genomics, 1986, 204, 417-423.	2.4	236
60	Catalytic Plasticity of Fatty Acid Modification Enzymes Underlying Chemical Diversity of Plant Lipids. , 1998, 282, 1315-1317.		235
61	Identification of a cellulose synthase-associated protein required for cellulose biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12866-12871.	3.3	228
62	Altered regulation of lipid biosynthesis in a mutant of Arabidopsis deficient in chloroplast glycerol-3-phosphate acyltransferase activity. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 4143-4147.	3.3	225
63	A fortunate choice: the history of Arabidopsis as a model plant. Nature Reviews Genetics, 2002, 3, 883-889.	7.7	220
64	Accumulation of Ricinoleic, Lesquerolic, and Densipolic Acids in Seeds of Transgenic Arabidopsis Plants That Express a Fatty Acyl Hydroxylase cDNA from Castor Bean. Plant Physiology, 1997, 113, 933-942.	2.3	214
65	Mutants of Arabidopsis with Altered Regulation of Starch Degradation. Plant Physiology, 1991, 95, 1181-1188.	2.3	213
66	The Arabidopsis SKU5 Gene Encodes an Extracellular Glycosyl Phosphatidylinositolâ€“Anchored Glycoprotein Involved in Directional Root Growth[W]. Plant Cell, 2002, 14, 1635-1648.	3.1	210
67	Photorespiration-deficient Mutants of Arabidopsis thaliana Lacking Mitochondrial Serine Transhydroxymethylase Activity. Plant Physiology, 1981, 67, 666-671.	2.3	206
68	Microspore Separation in the quartet 3 Mutants of Arabidopsis Is Impaired by a Defect in a Developmentally Regulated Polygalacturonase Required for Pollen Mother Cell Wall Degradation. Plant Physiology, 2003, 133, 1170-1180.	2.3	204
69	Ferulate-5-hydroxylase from Arabidopsis thaliana defines a new family of cytochrome P450-dependent monooxygenases.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 6869-6874.	3.3	197
70	A phosphoglycolate phosphatase-deficient mutant of Arabidopsis. Nature, 1979, 280, 833-836.	13.7	196
71	A Starch Deficient Mutant of Arabidopsis thaliana with Low ADPglucose Pyrophosphorylase Activity Lacks One of the Two Subunits of the Enzyme. Plant Physiology, 1988, 88, 1175-1181.	2.3	191
72	A non-specific lipid transfer protein from Arabidopsis is a cell wall protein. Plant Journal, 1993, 3, 427-436.	2.8	189

#	Article	IF	Citations
73	50Âyears of Arabidopsis research: highlights and future directions. New Phytologist, 2016, 209, 921-944.	3.5	186
74	Genetic control of morphogenesis inArabidopsis. Genesis, 1988, 9, 73-89.	3.1	179
75	Isolation of mutants of Acinetobacter calcoaceticus deficient in wax ester synthesis and complementation of one mutation with a gene encoding a fatty acyl coenzyme A reductase. Journal of Bacteriology, 1997, 179, 2969-2975.	1.0	179
76	VACUOLELESS1 Is an Essential Gene Required for Vacuole Formation and Morphogenesis in Arabidopsis. Developmental Cell, 2001, 1, 303-310.	3.1	179
77	Transcriptional Coordination of the Metabolic Network in Arabidopsis. Plant Physiology, 2006, 142, 762-774.	2.3	178
78	An Arabidopsis Mutant Resistant to Thaxtomin A, a Cellulose Synthesis Inhibitor from Streptomyces Species[W]. Plant Cell, 2003, 15, 1781-1794.	3.1	177
79	Î±-Glucosidase I is required for cellulose biosynthesis and morphogenesis in Arabidopsis. Journal of Cell Biology, 2002, 156, 1003-1013.	2.3	174
80	Tetrad pollen formation in quartet mutants of Arabidopsis thaliana is associated with persistence of pectic polysaccharides of the pollen mother cell wall. Plant Journal, 1998, 15, 79-88.	2.8	172
81	Effect of Light Quality and Vernalization on Late-Flowering Mutants of Arabidopsis thaliana. Plant Physiology, 1990, 92, 770-776.	2.3	168
82	A Mutant of Arabidopsis thaliana Which Lacks Activation of RuBP Carboxylase In Vivo. Plant Physiology, 1982, 70, 381-387.	2.3	167
83	Cellulose microfibril crystallinity is reduced by mutating C-terminal transmembrane region residues CESA1 ^{A903V} and CESA3 ^{T942I} of cellulose synthase. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4098-4103.	3.3	165
84	A Mutant of Arabidopsis Deficient in C_{18:3} and C_{16:3} Leaf Lipids. Plant Physiology, 1986, 81, 859-864.	2.3	163
85	The sulfolipid sulfoquinovosyldiacylglycerol is not required for photosynthetic electron transport in Rhodobacter sphaeroides but enhances growth under phosphate limitation.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 1561-1565.	3.3	163
86	The Arabidopsis SKU6/SPIRAL1 Gene Encodes a Plus Endâ€“Localized Microtubule-Interacting Protein Involved in Directional Cell Expansion[W]. Plant Cell, 2004, 16, 1506-1520.	3.1	163
87	A bifunctional oleate 12â€hydroxylase: desaturase fromLesquerella fendleri. Plant Journal, 1998, 13, 201-210.	2.8	162
88	A Role for Membrane Lipid Polyunsaturation in Chloroplast Biogenesis at Low Temperature. Plant Physiology, 1992, 99, 197-202.	2.3	161
89	The genetics of plant lipids. Lipids and Lipid Metabolism, 1991, 1082, 1-26.	2.6	160
90	POLYGALACTURONASE INVOLVED IN EXPANSION1 Functions in Cell Elongation and Flower Development in Arabidopsis. Plant Cell, 2014, 26, 1018-1035.	3.1	160

#	Article	IF	Citations
91	A Mutant of Arabidopsis Lacking a Chloroplast-Specific Lipid. Science, 1985, 227, 763-765.	6.0	159
92	A Mutation at the fad8 Locus of Arabidopsis Identifies a Second Chloroplast [omega]-3 Desaturase. Plant Physiology, 1994, 106, 1609-1614.	2.3	158
93	The Billion-Ton Biofuels Vision. Science, 2006, 312, 1277-1277.	6.0	158
94	CHITINASE-LIKE1/POM-POM1 and Its Homolog CTL2 Are Glucan-Interacting Proteins Important for Cellulose Biosynthesis in Arabidopsis. Plant Cell, 2012, 24, 589-607.	3.1	158
95	Analysis of Photosynthesis with Mutants of Higher Plants and Algae. Annual Review of Plant Physiology, 1986, 37, 467-506.	11.1	150
96	Construction and characterization of a yeast artificial chromosome library of Arabidopsis which is suitable for chromosome walking. Molecular Genetics and Genomics, 1991, 226, 484-90.	2.4	149
97	Biofuels. Current Biology, 2007, 17, R115-R119.	1.8	149
98	Mutations of cellulose synthase (CESA1) phosphorylation sites modulate anisotropic cell expansion and bidirectional mobility of cellulose synthase. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17188-17193.	3.3	148
99	Genetic Evidence That Cellulose Synthase Activity Influences Microtubule Cortical Array Organization Â Â. Plant Physiology, 2008, 147, 1723-1734.	2.3	147
100	Mutations at the Arabidopsis CHM locus promote rearrangements of the mitochondrial genome.. Plant Cell, 1992, 4, 889-899.	3.1	146
101	An Early Arabidopsis Demonstration. Resolving a Few Issues Concerning Photorespiration: Fig. 1.. Plant Physiology, 2001, 125, 20-24.	2.3	146
102	Plant neurobiology: no brain, no gain?. Trends in Plant Science, 2007, 12, 135-136.	4.3	146
103	Enhanced Thermal Tolerance of Photosynthesis and Altered Chloroplast Ultrastructure in a Mutant of Arabidopsis Deficient in Lipid Desaturation. Plant Physiology, 1989, 90, 1134-1142.	2.3	144
104	Photorespiration mutants of Arabidopsis thaliana deficient in serine-glyoxylate aminotransferase activity. Proceedings of the National Academy of Sciences of the United States of America, 1980, 77, 2684-2687.	3.3	142
105	Metabolic click-labeling with a fucose analog reveals pectin delivery, architecture, and dynamics in Arabidopsis cell walls. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1329-1334.	3.3	141
106	Welcome to Biotechnology for Biofuels. Biotechnology for Biofuels, 2008, 1, 1.	6.2	140
107	Genetic Control of Root Hair Development in Arabidopsis thaliana. Plant Cell, 1990, 2, 235.	3.1	139
108	GENETIC ENGINEERING OF PLANT LIPIDS. Annual Review of Nutrition, 1999, 19, 197-216.	4.3	138

#	Article	IF	Citations
109	A Mutant of Arabidopsis Deficient in the Chloroplast 16:1/18:1 Desaturase. Plant Physiology, 1989, 90, 522-529.	2.3	136
110	Mutations in UDP-Glucose:Sterol Glucosyltransferase in Arabidopsis Cause Transparent Testa Phenotype and Suberization Defect in Seeds Â Â Â. Plant Physiology, 2009, 151, 78-87.	2.3	135
111	Integrative approaches to determining Csl function. , 2001, 47, 131-143.		134
112	Genetic modification of photorespiration. Trends in Biochemical Sciences, 1982, 7, 171-174.	3.7	132
113	Glycosylphosphatidylinositol-Anchored Proteins Are Required for Cell Wall Synthesis and Morphogenesis in Arabidopsis. Plant Cell, 2005, 17, 1128-1140.	3.1	132
114	A Mutant of Arabidopsis Deficient in Desaturation of Palmitic Acid in Leaf Lipids. Plant Physiology, 1989, 90, 943-947.	2.3	131
115	Direct tests of the role of membrane lipid composition in low-temperature-induced photoinhibition and chilling sensitivity in plants and cyanobacteria.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 6215-6218.	3.3	131
116	Isolation of a cDNA Clone for Spinach Lipid Transfer Protein and Evidence that the Protein Is Synthesized by the Secretory Pathway. Plant Physiology, 1991, 95, 164-170.	2.3	130
117	Phenotypic Suppression of the Gibberellin-Insensitive Mutant (gai) of Arabidopsis. Plant Physiology, 1995, 108, 495-502.	2.3	130
118	Collapsed Xylem Phenotype of Arabidopsis Identifies Mutants Deficient in Cellulose Deposition in the Secondary Cell Wall. Plant Cell, 1997, 9, 689.	3.1	130
119	Cloning and expression of the Rhodospirillum rubrum ribulosebisphosphate carboxylase gene in E. coli. Molecular Genetics and Genomics, 1984, 193, 214-219.	2.4	129
120	The Implications of Lignocellulosic Biomass Chemical Composition for the Production of Advanced Biofuels. BioScience, 2014, 64, 192-201.	2.2	128
121	Positive Selection for Male-Sterile Mutants of Arabidopsis Lacking Adenine Phosphoribosyl Transferase Activity. Plant Physiology, 1988, 86, 1150-1154.	2.3	123
122	Dissecting desaturation: plants prove advantageous. Trends in Cell Biology, 1996, 6, 148-153.	3.6	122
123	Genetic Engineering and Water. Science, 2001, 292, 2217-2217.	6.0	120
124	The mutants of Arabidopsis. Trends in Genetics, 1986, 2, 89-93.	2.9	119
125	Nonmotile Cellulose Synthase Subunits Repeatedly Accumulate within Localized Regions at the Plasma Membrane in Arabidopsis Hypocotyl Cells following 2,6-Dichlorobenzonitrile Treatment. Plant Physiology, 2007, 145, 334-338.	2.3	113
126	Isolation and genetic complementation of a sulfolipid-deficient mutant of Rhodobacter sphaeroides. Journal of Bacteriology, 1992, 174, 2352-2360.	1.0	109

#	Article	IF	Citations
127	GENOMICS: Plant Biology in 2010. Science, 2000, 290, 2077-2078.	6.0	107
128	Enhanced Thermal Tolerance in a Mutant of Arabidopsis Deficient in Palmitic Acid Unsaturation. Plant Physiology, 1989, 91, 401-408.	2.3	105
129	Suspensor-derived polyembryony caused by altered expression of valyl-tRNA synthetase in the twn2 mutant of Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 7349-7355.	3.3	105
130	Cellularisation in the endosperm of Arabidopsis thaliana is coupled to mitosis and shares multiple components with cytokinesis. Development (Cambridge), 2002, 129, 5567-5576.	1.2	103
131	Identification of a Gene that Complements an Arabidopsis Mutant Deficient in Chloroplast [omega]6 Desaturase Activity. Plant Physiology, 1994, 106, 1453-1459.	2.3	97
132	Analysis of Photosynthetic Antenna Function in a Mutant of Arabidopsis thaliana (L.) Lacking trans-Hexadecenoic Acid. Plant Physiology, 1985, 78, 853-858.	2.3	95
133	Complexes with Mixed Primary and Secondary Cellulose Synthases Are Functional in Arabidopsis Plants Â Â. Plant Physiology, 2012, 160, 726-737.	2.3	95
134	A comparative systems analysis of polysaccharideâ€elicited responses in <scp>N</scp>eurospora crassa reveals carbon sourceâ€specific cellular adaptations. Molecular Microbiology, 2014, 91, 275-299.	1.2	95
135	A conserved role for kinesin-5 in plant mitosis. Journal of Cell Science, 2007, 120, 2819-2827.	1.2	94
136	BRASSINOSTEROID INSENSITIVE2 negatively regulates cellulose synthesis in Arabidopsis by phosphorylating cellulose synthase 1. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3533-3538.	3.3	89
137	Characterization of Synthetic Hydroxyproline-Rich Proteoglycans with Arabinogalactan Protein and Extensin Motifs in Arabidopsis. Plant Physiology, 2006, 142, 458-470.	2.3	87
138	The Construction of Arabidopsis Expressed Sequence Tag Assemblies (A New Resource to Facilitate) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.3	86
139	Coidentity of putative amylase inhibitors from barley and finger millet with phospholipid transfer proteins inferred from amino acid sequence homology. Archives of Biochemistry and Biophysics, 1989, 269, 695-697.	1.4	81
140	Cytokinesis-Defective Mutants of Arabidopsis. Plant Physiology, 2002, 129, 678-690.	2.3	80
141	The Effects of Reduced Amounts of Lipid Unsaturation on Chloroplast Ultrastructure and Photosynthesis in a Mutant of Arabidopsis. Plant Physiology, 1987, 84, 353-360.	2.3	77
142	Characterization of an HSP70 Cognate Gene Family in Arabidopsis. Plant Physiology, 1988, 88, 731-740.	2.3	76
143	Global expression analysis of CESA and CSL genes in Arabidopsis. Cellulose, 2004, 11, 279-286.	2.4	76
144	The role of cytochrome b5 in Î”12 desaturation of oleic acid by microsomes of safflower (Carthamus) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.4	75

#	Article	IF	Citations
145	The GRV2/RMEâ€8 protein of Arabidopsis functions in the late endocytic pathway and is required for vacuolar membrane flow. Plant Journal, 2008, 53, 29-41.	2.8	74
146	A Mutation Causing Imidazolinone Resistance Maps to the Csr1 Locus of Arabidopsis thaliana. Plant Physiology, 1990, 92, 1081-1085.	2.3	73
147	Identification of an operon involved in sulfolipid biosynthesis in Rhodobacter sphaeroides. Journal of Bacteriology, 1992, 174, 6479-6487.	1.0	73
148	The gravitropism defective 2 Mutants of Arabidopsis Are Deficient in a Protein Implicated in Endocytosis in Caenorhabditis elegans. Plant Physiology, 2004, 136, 3095-3103.	2.3	73
149	Cellulose synthesis: Cloning in silico. Current Biology, 1997, 7, R108-R111.	1.8	69
150	Abscisic acid or high osmoticum promote accumulation of long-chain fatty acids in developing embryos of Brassica napus. Plant Science, 1989, 61, 213-217.	1.7	68
151	Plant polymers for biodegradable plastics: Cellulose, starch and polyhydroxyalkanoates. Molecular Breeding, 1995, 1, 105-122.	1.0	65
152	Synthesis of high-molecular-weight poly([r]-(-)-3-hydroxybutyrate) in transgenic Arabidopsis thaliana plant cells. International Journal of Biological Macromolecules, 1995, 17, 7-12.	3.6	63
153	A Chilling Sensitive Mutant of Arabidopsis with Altered Steryl-Ester Metabolism. Plant Physiology, 1990, 93, 1053-1062.	2.3	62
154	Cloning, expression, and characterization of an oligoxyloglucan reducing end-specific xyloglucanobiohydrolase from Aspergillus nidulans. Carbohydrate Research, 2005, 340, 2590-2597.	1.1	60
155	Isolation of photosynthetically active protoplasts and chloroplasts from Arabidopsis thaliana. Plant Science Letters, 1981, 21, 89-96.	1.9	59
156	Cellulose Deficiency Is Enhanced on Hyper Accumulation of Sucrose by a H⁺-Coupled Sucrose Symporter. Plant Physiology, 2016, 171, 110-124.	2.3	57
157	Expressed Sequence Tags from Developing Castor Seeds. Plant Physiology, 1995, 108, 1141-1150.	2.3	56
158	Prefoldin 6 is required for normal microtubule dynamics and organization in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18064-18069.	3.3	56
159	Mutants of Escherichia coli defective in the degradation of guanosine 5â€²-triphosphate, 3â€²-diphosphate (pppGpp). Molecular Genetics and Genomics, 1979, 169, 315-323.	2.4	55
160	Identification and characterization of a galacturonic acid transporter from Neurospora crassa and its application for Saccharomyces cerevisiae fermentation processes. Biotechnology for Biofuels, 2014, 7, 20.	6.2	54
161	Anisotropic Cell Expansion Is Affected through the Bidirectional Mobility of Cellulose Synthase Complexes and Phosphorylation at Two Critical Residues on CESA3. Plant Physiology, 2016, 171, 242-250.	2.3	54
162	Plants as Factories for Technical Materials. Plant Physiology, 2001, 125, 168-171.	2.3	53

#	Article	IF	Citations
163	Altered regulation of Â-amylase activity in mutants of Arabidopsis with lesions in starch metabolism. Proceedings of the National Academy of Sciences of the United States of America, 1989, 86, 5830-5833.	3.3	51
164	Altered Chloroplast Structure and Function in a Mutant of Arabidopsis Deficient in Plastid Glycerol-3-Phosphate Acyltransferase Activity. Plant Physiology, 1989, 90, 846-853.	2.3	49
165	Perspectives on the production of polyhydroxyalkanoates in plants. FEMS Microbiology Letters, 1992, 103, 237-246.	0.7	49
166	Use of transgenic plants and mutants to study the regulation and function of lipid composition. Plant, Cell and Environment, 1994, 17, 627-637.	2.8	48
167	Progress in plant metabolic engineering. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 8925-8927.	3.3	46
168	Isolating plant genes. Trends in Biotechnology, 1993, 11, 306-313.	4.9	42
169	Best practices for biofuels. Science, 2014, 344, 1095-1096.	6.0	40
170	Development of feedstocks for cellulosic biofuels. F1000 Biology Reports, 2012, 4, 10.	4.0	40
171	Changes in lipid composition during protoplast isolation. Plant Science, 1988, 56, 15-20.	1.7	39
172	Imaging plant cell death: GFP-Nit1 aggregation marks an early step of wound and herbicide induced cell death. BMC Plant Biology, 2005, 5, 4.	1.6	39
173	Shootward and rootward: peak terminology for plant polarity. Trends in Plant Science, 2010, 15, 593-594.	4.3	39
174	The biochemistry and cell biology of photorespiration. Critical Reviews in Plant Sciences, 1986, 4, 121-147.	2.7	37
175	Identification of MEDIATOR16 as the Arabidopsis COBRA suppressor MONGOOSE1. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 16048-16053.	3.3	37
176	Cellulose synthase interacting protein. Plant Signaling and Behavior, 2010, 5, 1571-1574.	1.2	36
177	Genetic engineering of commercially useful biosynthetic pathways in transgenic plants. Current Opinion in Biotechnology, 1993, 4, 152-158.	3.3	35
178	The Arabidopsis COBRA Protein Facilitates Cellulose Crystallization at the Plasma Membrane. Journal of Biological Chemistry, 2014, 289, 34911-34920.	1.6	35
179	The Twentieth Century Trajectory of Plant Biology. Cell, 2000, 100, 13-25.	13.5	32
180	Chilling-sensitive mutants of arabidopsis. Plant Molecular Biology Reporter, 1995, 13, 11-17.	1.0	29

#	Article	IF	Citations
181	Progress toward biologically produced Biodegradable Thermoplastics. Advanced Materials, 1993, 5, 30-37.	11.1	27
182	Flat-Surface grafting inArabidopsis thaliana. Plant Molecular Biology Reporter, 1995, 13, 118-123.	1.0	27
183	Preliminary crystallographic data for stearoyl-acyl carrier protein desaturase from castor seed. Journal of Molecular Biology, 1992, 225, 561-564.	2.0	25
184	A Genetic Screen for Mutations Affecting Cell Division in the Arabidopsis thaliana Embryo Identifies Seven Loci Required for Cytokinesis. PLoS ONE, 2016, 11, e0146492.	1.1	24
185	The transcription factor PDR-1 is a multi-functional regulator and key component of pectin deconstruction and catabolism in Neurospora crassa. Biotechnology for Biofuels, 2017, 10, 149.	6.2	24
186	Plasmid [omega]-3 Fatty Acid Desaturase cDNA from Ricinus communis. Plant Physiology, 1994, 105, 443-444.	2.3	23
187	Sequence of a Complementary DNA from Cucumis sativus L. Encoding the Stearoyl-Acyl-Carrier Protein Desaturase. Plant Physiology, 1991, 97, 467-468.	2.3	22
188	FlAsH-based live-cell fluorescent imaging of synthetic peptides expressed in Arabidopsis and tobacco. BioTechniques, 2006, 41, 569-574.	0.8	22
189	Integrative approaches to determining Csl function. , 2001, , 131-143.		22
190	Primary Structure of Cytochrome b₅ from Cauliflower (Brassica oleracea) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.3	21
191	A chilling-sensitive mutant of Arabidopsis is deficient in chloroplast protein accumulation at low temperature*. Plant, Cell and Environment, 1995, 18, 23-32.	2.8	21
192	Nucleotide Sequence of Acyl-Acyl Carrier Protein: Glycerol-3-Phosphate Acyltransferase from Cucumber. Plant Physiology, 1992, 99, 771-772.	2.3	20
193	TRANVIA (TVA) facilitates cellulose synthase trafficking and delivery to the plasma membrane. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	20
194	Transfer of the maize transposable element MU1 into Arabidopsis thaliana. Plant Science, 1987, 48, 165-173.	1.7	16
195	The irregular xylem3 Locus of Arabidopsis Encodes a Cellulose Synthase Required for Secondary Cell Wall Synthesis. Plant Cell, 1999, 11, 769.	3.1	15
196	The primary structure of chicken liver cytochrome b5 deduced from the DNA sequence of a cDNA clone. Archives of Biochemistry and Biophysics, 1988, 264, 343-347.	1.4	13
197	Arabidopsis as a Tool for the Identification of Genes Involved in Plant Development. Plant Gene Research, 1988, , 1-25.	0.4	13
198	Linkage Relationships of Mutations that Affect Fatty Acid Composition in Arabidopsis. Journal of Heredity, 1991, 82, 484-488.	1.0	12

#	Article	IF	Citations
199	Drosophila P-element transcripts are incorrectly processed in tobacco. Plant Molecular Biology, 1988, 11, 601-607.	2.0	11
200	The Genetically Modified Organism Conflict. Plant Physiology, 2000, 123, 1201-1202.	2.3	11
201	Purification of adenine phosphoribosyltransferase from Brassica juncea. Archives of Biochemistry and Biophysics, 1990, 283, 484-490.	1.4	10
202	Arabidopsis Blooms. Plant Cell, 1989, 1, 1131.	3.1	10
203	Soluble and membrane-bound forms of cytochrome b5 are the products of a single gene in chicken. Archives of Biochemistry and Biophysics, 1990, 280, 412-415.	1.4	8
204	How big is the bioenergy piece of the energy pie? Who caresâ€”it's pie!. Biotechnology and Bioengineering, 2014, 111, 1717-1718.	1.7	6
205	Next generation biofuels. , 2015, , .		6
206	Prospects for genetic modification of the composition of edible oils from higher plants. Food Biotechnology, 1991, 5, 217-228.	0.6	5
207	A dual mechanism of cellulose deficiency in shv3svl1. Plant Signaling and Behavior, 2016, 11, e1218108.	1.2	5
208	The physical map of an Arabidopsis chromosome. Trends in Plant Science, 1996, 1, 2.	4.3	4
209	Plant Biology in the Post-Gutenberg Era (Everything You Wanted to Know and More on the World) Tj ETQq1 1 0.784314 rgBT /Overlo	2.3	4
210	O-Glycan analysis of cellobiohydrolase I fromNeurospora crassa. Glycobiology, 2016, 26, 670-677.	1.3	4
211	Implementing industrialâ€“academic partnerships to advance bioenergy research: the Energy Biosciences Institute. Current Opinion in Biotechnology, 2017, 45, 184-190.	3.3	4
212	Genetic Manipulation of the Fatty Acid Composition of Plant Lipids. , 1988, , 19-44.		4
213	A Mutant of Arabidopsis thaliana that Exhibits Chlorosis in Air but Not in Atmospheres Enriched in CO₂. Plant Physiology, 1988, 87, 83-88.	2.3	3
214	Arabidopsis at 7: Still Growing like a Weed. Plant Cell, 1996, 8, 1917.	3.1	3
215	Responseâ€”Biofuels. Science, 2009, 326, 1346-1346.	6.0	3
216	The Cellulose Synthase Superfamily. , 2007, , 35-48.		2

#	Article	IF	Citations
217	Mutations at the Arabidopsis CHM Locus Promote Rearrangements of the Mitochondrial Genome. Plant Cell, 1992, 4, 889.	3.1	1
218	The Arabidopsis COBRA protein facilitates cellulose crystallization at the plasma membrane.. Journal of Biological Chemistry, 2015, 290, 25274.	1.6	1
219	Elucidating Lipid Metabolism Using Mutants of Arabidopsis. , 1991, , 707-718.		1
220	Biofuels:. California Agriculture, 2009, 63, 155-158.	0.5	1
221	Arabidopsis Genetics and Functional Genomics in the Post-genome Era. , 2001, , 563-592.		1
222	Deciphering the Parts List for the Mechanical Plant. Daedalus, 2012, 141, 89-97.	0.9	0