Simon R Turner

List of Publications by Year
in descending order

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68 papers	8,780 citations	66234 42 h-index	106150 65 g-index
72 all docs	72 docs citations	72 times ranked	6273 citing authors

#	Article	IF	Citations
1	Identification of Novel Genes in Arabidopsis Involved in Secondary Cell Wall Formation Using Expression Profiling and Reverse Genetics. Plant Cell, 2005, 17, 2281-2295.	3.1	715
2	Interactions among three distinct CesA proteins essential for cellulose synthesis. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1450-1455.	3.3	657
3	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
4	Multiple Cellulose Synthase Catalytic Subunits Are Required for Cellulose Synthesis in Arabidopsis. Plant Cell, 2000, 12, 2529-2539.	3.1	441
5	Cloning and characterization of irregular xylem4 (irx4): a severely lignin-deficient mutant of Arabidopsis. Plant Journal, 2001, 26, 205-216.	2.8	400
6	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
7	PXY, a Receptor-like Kinase Essential for Maintaining Polarity during Plant Vascular-Tissue Development. Current Biology, 2007, 17, 1061-1066.	1.8	361
8	Comparison of five xylan synthesis mutants reveals new insight into the mechanisms of xylan synthesis. Plant Journal, 2007, 52, 1154-1168.	2.8	338
9	The PXY-CLE41 receptor ligand pair defines a multifunctional pathway that controls the rate and orientation of vascular cell division. Development (Cambridge), 2010, 137, 767-774.	1.2	309
10	Absence of branches from xylan in Arabidopsis gux mutants reveals potential for simplification of lignocellulosic biomass. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17409-17414.	3.3	283
11	Characterization of IRX10 and IRX10â€like reveals an essential role in glucuronoxylan biosynthesis in Arabidopsis. Plant Journal, 2009, 57, 732-746.	2.8	279
12	BOTERO1 is required for normal orientation of cortical microtubules and anisotropic cell expansion in Arabidopsis. Plant Journal, 2001, 25, 137-148.	2.8	265
13	WOX4 and WOX14 act downstream of the PXY receptor kinase to regulate plant vascular proliferation independently of any role in vascular organisation. Development (Cambridge), 2013, 140, 2224-2234.	1.2	251
14	Control of Cellulose Synthase Complex Localization in Developing Xylem. Plant Cell, 2003, 15, 1740-1748.	3.1	228
15	Secondary cell walls: biosynthesis and manipulation. Journal of Experimental Botany, 2016, 67, 515-531.	2.4	216
16	Tracheary Element Differentiation. Annual Review of Plant Biology, 2007, 58, 407-433.	8.6	208
17	Arabidopsis â€“ a powerful model system for plant cell wall research. Plant Journal, 2010, 61, 1107-1121.	2.8	184
18	Plant Vascular Cell Division Is Maintained by an Interaction between PXY and Ethylene Signalling. PLoS Genetics, 2012, 8, e1002997.	1.5	172

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19	The irregular xylem 2 mutant is an allele of korrigan that affects the secondary cell wall of Arabidopsis thaliana. Plant Journal, 2004, 37, 730-740.	2.8	166
20	The roles of the cytoskeleton during cellulose deposition at the secondary cell wall. Plant Journal, 2008, 54, 794-805.	2.8	140
21	Arabidopsis genes IRREGULAR XYLEM (IRX15) and IRX15L encode DUF579â€containing proteins that are essential for normal xylan deposition in the secondary cell wall. Plant Journal, 2011, 66, 401-413.	2.8	134
22	Plant cellulose synthesis: CESA proteins crossing kingdoms. Phytochemistry, 2015, 112, 91-99.	1.4	131
23	Collapsed Xylem Phenotype of Arabidopsis Identifies Mutants Deficient in Cellulose Deposition in the Secondary Cell Wall. Plant Cell, 1997, 9, 689.	3.1	130
24	Severing at sites of microtubule crossover contributes to microtubule alignment in cortical arrays. Plant Journal, 2007, 52, 742-751.	2.8	126
25	SPIRAL2 Determines Plant Microtubule Organization by Modulating Microtubule Severing. Current Biology, 2013, 23, 1902-1907.	1.8	123
26	Wood Formation in Trees Is Increased by Manipulating PXY-Regulated Cell Division. Current Biology, 2015, 25, 1050-1055.	1.8	123
27	Elucidating the Mechanisms of Assembly and Subunit Interaction of the Cellulose Synthase Complex of Arabidopsis Secondary Cell Walls. Journal of Biological Chemistry, 2009, 284, 3833-3841.	1.6	108
28	A PXY-Mediated Transcriptional Network Integrates Signaling Mechanisms to Control Vascular Development in Arabidopsis. Plant Cell, 2020, 32, 319-335.	3.1	103
29	Cellulose synthesis in the Arabidopsis secondary cell wall. Cellulose, 2004, 11, 329-338.	2.4	100
30	A Comprehensive Analysis of RALF Proteins in Green Plants Suggests There Are Two Distinct Functional Groups. Frontiers in Plant Science, 2017, 8, 37.	1.7	84
31	S-Acylation of the cellulose synthase complex is essential for its plasma membrane localization. Science, 2016, 353, 166-169.	6.0	75
32	Regulation of vascular cell division. Journal of Experimental Botany, 2017, 68, 27-43.	2.4	69
33	Trafficking of the Plant Cellulose Synthase Complex. Plant Physiology, 2010, 153, 427-432.	2.3	66
34	Isolation of COV1, a gene involved in the regulation of vascular patterning in the stem of Arabidopsis. Development (Cambridge), 2003, 130, 2139-2148.	1.2	57
35	Mutations of the secondary cell wall. Plant Molecular Biology, 2001, 47, 209-219.	2.0	56
36	Coordination of the cell-specific distribution of the four subunits of glycine decarboxylase and of serine hydroxymethyltransferase in leaves of C3-C4 intermediate species from different genera. Planta, 1993, 190, 468.	1.6	53

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37	A simple, flexible and efficient PCR-fusion/Gateway cloning procedure for gene fusion, site-directed mutagenesis, short sequence insertion and domain deletions and swaps. Plant Methods, 2009, 5, 14.	1.9	53
38	Structure of cellulose-deficient secondary cell walls from the irx3 mutant of Arabidopsis thaliana. Phytochemistry, 2002, 61, 7-14.	1.4	51
39	Cellulose synthase complex organization and cellulose microfibril structure. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170048.	1.6	51
40	Protocol: a medium-throughput method for determination of cellulose content from single stem pieces of Arabidopsis thaliana. Plant Methods, 2015, 11, 46.	1.9	50
41	Functional Analysis of Cellulose Synthase (CESA) Protein Class Specificity. Plant Physiology, 2017, 173, 970-983.	2.3	48
42	The organisation and expression of the genes encoding the mitochondrial glycine decarboxylase complex and serine hydroxymethyltransferase in pea (Pisum sativum). Molecular Genetics and Genomics, 1993, 236-236, 402-408.	2.4	45
43	hca: an Arabidopsis mutant exhibiting unusual cambial activity and altered vascular patterning. Plant Journal, 2005, 44, 271-289.	2.8	41
44	A Cellulose Synthase-Containing Compartment Moves Rapidly Beneath Sites of Secondary Wall Synthesis. Plant and Cell Physiology, 2009, 50, 584-594.	1.5	38
45	Development and application of a high throughput carbohydrate profiling technique for analyzing plant cell wall polysaccharides and carbohydrate active enzymes. Biotechnology for Biofuels, 2013, 6, 94.	6.2	36
46	The effect of different alleles at the r locus on the synthesis of seed storage proteins in Pisum sativum. Plant Molecular Biology, 1990, 14, 793-803.	2.0	34
47	Vascular Patterning. The Arabidopsis Book, 2003, 2, e0073.	0.5	33
48	An atlas of Arabidopsis protein S-acylation reveals its widespread role in plant cell organization and function. Nature Plants, 2022, 8, 670-681.	4.7	32
49	Exploiting CELLULOSE SYNTHASE (CESA) Class Specificity to Probe Cellulose Microfibril Biosynthesis. Plant Physiology, 2018, 177, 151-167.	2.3	31
50	The gapped xylem mutant identifies a common regulatory step in secondary cell wall deposition. Plant Journal, 2000, 24, 477-488.	2.8	27
51	An essential role for Abscisic acid in the regulation of xylem fibre differentiation. Development (Cambridge), 2018, 145, .	1.2	23
52	Organ-specific genetic interactions between paralogues of the PXY and ER receptor kinases enforce radial patterning in Arabidopsis vascular tissue. Development (Cambridge), 2019, 146, .	1.2	23
53	T-protein of the glycine decarboxylase multienzyme complex: evidence for partial similarity to formyltetrahydrofolate synthetase. Plant Molecular Biology, 1995, 27, 1215-1220.	2.0	20
54	Trafficking of the cellulose synthase complex in developing xylem vessels. Biochemical Society Transactions, 2010, 38, 755-760.	1.6	20

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55	The molecular basis of plant cellulose synthase complex organisation and assembly. Biochemical Society Transactions, 2021, 49, 379-391.	1.6	19
56	Multiple Cellulose Synthase Catalytic Subunits Are Required for Cellulose Synthesis in Arabidopsis. Plant Cell, 2000, 12, 2529.	3.1	17
57	Orientation of vascular cell divisions in Arabidopsis. Plant Signaling and Behavior, 2010, 5, 730-732.	1.2	13
58	Cell Walls: Monitoring Integrity with THE Kinase. Current Biology, 2007, 17, R541-R542.	1.8	9
59	A novel mechanism important for the alignment of microtubules. Plant Signaling and Behavior, 2008, 3, 238-239.	1.2	7
60	Realizing pipe dreams â€“ a detailed picture of vascular development. Journal of Experimental Botany, 2017, 68, 1-4.	2.4	6
61	A Specific Class of Short Treadmilling Microtubules Enhances Cortical Microtubule Alignment. Molecular Plant, 2016, 9, 1214-1216.	3.9	5
62	Cellulose Synthesis in the Arabidopsis Secondary Cell Wall. , 2007, , 49-61.		4
63	From the nucleus to the apoplast: building the plantâ€™s cell wall. Journal of Experimental Botany, 2016, 67, 445-447.	2.4	3
64	Using CellProfiler to Analyze and Quantify Vascular Morphology. Methods in Molecular Biology, 2017, 1544, 179-189.	0.4	3
65	Analysis of Secondary Cell Wall Formation in Arabidopsis. Progress in Biotechnology, 2001, 18, 85-92.	0.2	1
66	The gapped xylem mutant identifies a common regulatory step in secondary cell wall deposition. Plant Journal, 2000, 24, 477-488.	2.8	1
67	Mutations of the secondary cell wall. , 2001, , 209-219.		1
68	Flexible and digestible wood caused by viral-induced alteration of cell wall composition. Current Biology, 2022, , .	1.8	0