Alison Roberts

List of Publications by Year
in descending order

30 papers	1,545 citations	394421 19 h-index	501196 28 g-index
32 all docs	32 docs citations	32 times ranked	1812 citing authors

#	Article	IF	Citations
1	Cellulose synthesis complexes are homo-oligomeric and hetero-oligomeric inPhyscomitrium patens. Plant Physiology, 2022, 188, 2115-2130.	4.8	6
2	Phenotypic effects of changes in the FTVTxK region of an Arabidopsis secondary wall cellulose synthase compared with results from analogous mutations in other isoforms. Plant Direct, 2021, 5, e335.	1.9	6
3	Preferred crystallographic orientation of cellulose in plant primary cell walls. Nature Communications, 2020, 11, 4720.	12.8	41
4	In silico structure prediction of full-length cotton cellulose synthase protein (GhCESA1) and its hierarchical complexes. Cellulose, 2020, 27, 5597-5616.	4.9	13
5	Knocking Out the Wall: Revised Protocols for Gene Targeting in Physcomitrella patens. Methods in Molecular Biology, 2020, 2149, 125-144.	0.9	0
6	Convergent evolution of heteroâ€oligomeric cellulose synthesis complexes in mosses and seed plants. Plant Journal, 2019, 99, 862-876.	5.7	9
7	Structure/function relationships in the rosette cellulose synthesis complex illuminated by an evolutionary perspective. Cellulose, 2019, 26, 227-247.	4.9	31
8	Functional Characterization of a Glycosyltransferase from the Moss Physcomitrella patens Involved in the Biosynthesis of a Novel Cell Wall Arabinoglucan. Plant Cell, 2018, 30, 1293-1308.	6.6	22
9	Cellulose synthase â€˜class specific regionsâ€™ are intrinsically disordered and functionally undifferentiated. Journal of Integrative Plant Biology, 2018, 60, 481-497.	8.5	23
10	Direct observation of the effects of cellulose synthesis inhibitors using live cell imaging of Cellulose Synthase (CESA) in Physcomitrella patens. Scientific Reports, 2018, 8, 735.	3.3	21
11	Cellulose microfibril structure: inspirations from plant diversity. IOP Conference Series: Earth and Environmental Science, 2018, 130, 012001.	0.3	0
12	Domain swaps of Arabidopsis secondary wall cellulose synthases to elucidate their class specificity. Plant Direct, 2018, 2, e00061.	1.9	11
13	Functional Specialization of Cellulose Synthase Isoforms in a Moss Shows Parallels with Seed Plants. Plant Physiology, 2017, 175, 210-222.	4.8	34
14	Immuno and Affinity Cytochemical Analysis of Cell Wall Composition in the Moss Physcomitrella patens. Frontiers in Plant Science, 2016, 7, 248.	3.6	33
15	Cellulose synthase gene expression profiling of Physcomitrella patens. Plant Biology, 2016, 18, 362-368.	3.8	14
16	Comparative Structural and Computational Analysis Supports Eighteen Cellulose Synthases in the Plant Cellulose Synthesis Complex. Scientific Reports, 2016, 6, 28696.	3.3	174
17	The valine and lysine residues in the conserved FxVTxK motif are important for the function of phylogenetically distant plant cellulose synthases. Glycobiology, 2016, 26, 509-519.	2.5	14
18	A Complementation Assay for in Vivo Protein Structure/Function Analysis inPhyscomitrella patens(Funariaceae). Applications in Plant Sciences, 2015, 3, 1500023.	2.1	24

#	Article	IF	Citations
19	Moss cell walls: structure and biosynthesis. Frontiers in Plant Science, 2012, 3, 166.	3.6	81
20	The ability of land plants to synthesize glucuronoxylans predates the evolution of tracheophytes. Glycobiology, 2012, 22, 439-451.	2.5	63
21	The Glycosyltransferase Repertoire of the Spikemoss Selaginella moellendorffii and a Comparative Study of Its Cell Wall. PLoS ONE, 2012, 7, e35846.	2.5	68
22	A CELLULOSE SYNTHASE (CESA) gene essential for gametophore morphogenesis in the moss Physcomitrella patens. Planta, 2012, 235, 1355-1367.	3.2	49
23	Knocking Out the Wall: Protocols for Gene Targeting in Physcomitrella patens. Methods in Molecular Biology, 2011, 715, 273-290.	0.9	30
24	Phylogenetically Distinct Cellulose Synthase Genes Support Secondary Wall Thickening in Arabidopsis Shoot Trichomes and Cotton Fiber. Journal of Integrative Plant Biology, 2010, 52, 205-220.	8.5	84
25	A CELLULOSE SYNTHASE (CESA) GENE FROM THE RED ALGA PORPHYRA YEZOENSIS (RHODOPHYTA)¹. Journal of Phycology, 2009, 45, 203-212.	2.3	27
26	Functional Genomic Analysis Supports Conservation of Function Among Cellulose Synthase-Like A Gene Family Members and Suggests Diverse Roles of Mannans in Plants. Plant Physiology, 2007, 143, 1881-1893.	4.8	201
27	High-throughput mapping of cell-wall polymers within and between plants using novel microarrays. Plant Journal, 2007, 50, 1118-1128.	5.7	286
28	The cellulose synthase (CESA) gene superfamily of the moss Physcomitrella patens. Plant Molecular Biology, 2006, 63, 207-219.	3.9	92
29	Cellulose synthase (CesA) genes in algae and seedless plants. Cellulose, 2004, 11, 419-435.	4.9	30
30	Cellulose Synthase (CesA) Genes in the Green Alga Mesotaenium caldariorum. Eukaryotic Cell, 2002, 1, 847-855.	3.4	55