# Alison Roberts

List of Publications by Year
in descending order



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|---|---|---|---|
| 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 | High-throughput mapping of cell-wall polymers within and between plants using novel microarrays. Plant Journal, 2007, 50, 1118-1128. | 5.7 | 286 |
| 2 | 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 |
| 3 | Comparative Structural and Computational Analysis Supports Eighteen Cellulose Synthases in the Plant Cellulose Synthesis Complex. Scientific Reports, 2016, 6, 28696. | 3.3 | 174 |
| 4 | The cellulose synthase (CESA) gene superfamily of the moss Physcomitrella patens. Plant Molecular Biology, 2006, 63, 207-219. | 3.9 | 92 |
| 5 | 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 |
| 6 | Moss cell walls: structure and biosynthesis. Frontiers in Plant Science, 2012, 3, 166. | 3.6 | 81 |
| 7 | The Glycosyltransferase Repertoire of the Spikemoss Selaginella moellendorffii and a Comparative Study of Its Cell Wall. PLoS ONE, 2012, 7, e35846. | 2.5 | 68 |
| 8 | The ability of land plants to synthesize glucuronoxylans predates the evolution of tracheophytes. Glycobiology, 2012, 22, 439-451. | 2.5 | 63 |
| 9 | Cellulose Synthase ( CesA ) Genes in the Green Alga Mesotaenium caldariorum. Eukaryotic Cell, 2002, 1, 847-855. | 3.4 | 55 |
| 10 | A CELLULOSE SYNTHASE (CESA) gene essential for gametophore morphogenesis in the moss Physcomitrella patens. Planta, 2012, 235, 1355-1367. | 3.2 | 49 |
| 11 | Preferred crystallographic orientation of cellulose in plant primary cell walls. Nature Communications, 2020, 11, 4720. | 12.8 | 41 |
| 12 | Functional Specialization of Cellulose Synthase Isoforms in a Moss Shows Parallels with Seed Plants. Plant Physiology, 2017, 175, 210-222. | 4.8 | 34 |
| 13 | Immuno and Affinity Cytochemical Analysis of Cell Wall Composition in the Moss Physcomitrella patens. Frontiers in Plant Science, 2016, 7, 248. | 3.6 | 33 |
| 14 | Structure/function relationships in the rosette cellulose synthesis complex illuminated by an evolutionary perspective. Cellulose, 2019, 26, 227-247. | 4.9 | 31 |
| 15 | Cellulose synthase (CesA) genes in algae and seedless plants. Cellulose, 2004, 11, 419-435. | 4.9 | 30 |
| 16 | Knocking Out the Wall: Protocols for Gene Targeting in Physcomitrella patens. Methods in Molecular Biology, 2011, 715, 273-290. | 0.9 | 30 |
| 17 | A CELLULOSE SYNTHASE (CESA) GENE FROM THE RED ALGA PORPHYRA YEZOENSIS (RHODOPHYTA)<sup>1</sup>. Journal of Phycology, 2009, 45, 203-212. | 2.3 | 27 |
| 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 | Cellulose synthase â€˜class specific regionsâ€™ are intrinsically disordered and functionally undifferentiated. Journal of Integrative Plant Biology, 2018, 60, 481-497. | 8.5 | 23 |
| 20 | 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 |
| 21 | 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 |
| 22 | Cellulose synthase gene expression profiling of Physcomitrella patens. Plant Biology, 2016, 18, 362-368. | 3.8 | 14 |
| 23 | 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 |
| 24 | In silico structure prediction of full-length cotton cellulose synthase protein (GhCESA1) and its hierarchical complexes. Cellulose, 2020, 27, 5597-5616. | 4.9 | 13 |
| 25 | Domain swaps of Arabidopsis secondary wall cellulose synthases to elucidate their class specificity. Plant Direct, 2018, 2, e00061. | 1.9 | 11 |
| 26 | Convergent evolution of heteroâ€oligomeric cellulose synthesis complexes in mosses and seed plants. Plant Journal, 2019, 99, 862-876. | 5.7 | 9 |
| 27 | 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 |
| 28 | Cellulose synthesis complexes are homo-oligomeric and hetero-oligomeric in Physcomitrium patens. Plant Physiology, 2022, 188, 2115-2130. | 4.8 | 6 |
| 29 | Cellulose microfibril structure: inspirations from plant diversity. IOP Conference Series: Earth and Environmental Science, 2018, 130, 012001. | 0.3 | 0 |
| 30 | Knocking Out the Wall: Revised Protocols for Gene Targeting in Physcomitrella patens. Methods in Molecular Biology, 2020, 2149, 125-144. | 0.9 | 0 |