Maria J Pea

List of Publications by Year in Descending Order

42 papers	2,595 citations	25 h-index	45 g-index
45 ext. papers	3,199 ext. citations	7.6 avg, IF	4.62 L-index

#	Paper	IF	Citations
42	Protocols for isolating and characterizing polysaccharides from plant cell walls: a case study using rhamnogalacturonan-II. *Biotechnology for Biofuels*, **2021**, 14, 142	7.8	3
41	FUT4 and FUT6 Are Arabinofuranose-Specific Fucosyltransferases. *Frontiers in Plant Science*, **2021**, 12, 589518	6.2	1
40	Mechanism and Reaction Energy Landscape for Apiose Cross-Linking by Boric Acid in Rhamnogalacturonan II. *Journal of Physical Chemistry B*, **2020**, 124, 10117-10125	3.4	3
39	Molecular Mechanism of Polysaccharide Acetylation by the Arabidopsis Xylan -acetyltransferase XOAT1. *Plant Cell*, **2020**, 32, 2367-2382	11.6	11
38	Locating Methyl-Etherified and Methyl-Esterified Uronic Acids in the Plant Cell Wall Pectic Polysaccharide Rhamnogalacturonan II. *SLAS Technology*, **2020**, 25, 329-344	3	7
37	Analytical Techniques for Determining the Role of Domain of Unknown Function 579 Proteins in the Synthesis of -Methylated Plant Polysaccharides. *SLAS Technology*, **2020**, 25, 345-355	3	2
36	Biochemical and Genetic Analysis Identify CSLD3 as a beta-1,4-Glucan Synthase That Functions during Plant Cell Wall Synthesis. *Plant Cell*, **2020**, 32, 1749-1767	11.6	19
35	Development of a thermophilic coculture for corn fiber conversion to ethanol. *Nature Communications*, **2020**, 11, 1937	17.4	25
34	Heterologous expression of plant glycosyltransferases for biochemistry and structural biology. *Methods in Cell Biology*, **2020**, 160, 145-165	1.8	2
33	Nanocellulose-Based Sustainable Dyeing of Cotton Textiles with Minimized Water Pollution. *ACS Omega*, **2020**, 5, 9196-9203	3.9	11
32	Gene regulatory networks for lignin biosynthesis in switchgrass (Panicum virgatum). *Plant Biotechnology Journal*, **2019**, 17, 580-593	11.6	36
31	Identification of an algal xylan synthase indicates that there is functional orthology between algal and plant cell wall biosynthesis. *New Phytologist*, **2018**, 218, 1049-1060	9.8	35
30	Changes in the abundance of cell wall apiogalacturonan and xylogalacturonan and conservation of rhamnogalacturonan II structure during the diversification of the Lemnoideae. *Planta*, **2018**, 247, 953-971	4.7	18
29	Designer biomass for next-generation biorefineries: leveraging recent insights into xylan structure and biosynthesis. *Biotechnology for Biofuels*, **2017**, 10, 286	7.8	48
28	Structural, mutagenic and in?silico studies of xyloglucan fucosylation in Arabidopsis thaliana suggest a water-mediated mechanism. *Plant Journal*, **2017**, 91, 931-949	6.9	36
27	Downregulation of a UDP-Arabinomutase Gene in Switchgrass (L.) Results in Increased Cell Wall Lignin While Reducing Arabinose-Glycans. *Frontiers in Plant Science*, **2016**, 7, 1580	6.2	16
26	Structural diversity of xylans in the cell walls of monocots. *Planta*, **2016**, 244, 589-606	4.7	50

25	Galactose-depleted xyloglucan is dysfunctional and leads to dwarfism in Arabidopsis. *Plant Physiology*, **2015**, 167, 1296-306	6.6	55
24	Xyloglucan, galactomannan, glucuronoxylan, and rhamnogalacturonan I do not have identical structures in soybean root and root hair cell walls. *Planta*, **2015**, 242, 1123-38	4.7	13
23	Loss of function of folylpolyglutamate synthetase 1 reduces lignin content and improves cell wall digestibility in Arabidopsis. *Biotechnology for Biofuels*, **2015**, 8, 224	7.8	20
22	Human gut Bacteroidetes can utilize yeast mannan through a selfish mechanism. *Nature*, **2015**, 517, 165-169	50.4	307
21	Two Arabidopsis proteins synthesize acetylated xylan in vitro. *Plant Journal*, **2014**, 80, 197-206	6.9	133
20	Structural characterization of the heteroxylans from poplar and switchgrass. *Methods in Molecular Biology*, **2012**, 908, 215-28	1.4	9
19	Introducing endo-xylanase activity into an exo-acting arabinofuranosidase that targets side chains. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 6537-42	11.5	59
18	Methods for structural characterization of the products of cellulose- and xyloglucan-hydrolyzing enzymes. *Methods in Enzymology*, **2012**, 510, 121-39	1.7	36
17	A galacturonic acid-containing xyloglucan is involved in Arabidopsis root hair tip growth. *Plant Cell*, **2012**, 24, 4511-24	11.6	72
16	The ability of land plants to synthesize glucuronoxylans predates the evolution of tracheophytes. *Glycobiology*, **2012**, 22, 439-51	5.8	49
15	4-O-methylation of glucuronic acid in Arabidopsis glucuronoxylan is catalyzed by a domain of unknown function family 579 protein. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 14253-8	11.5	123
14	The structure and function of an arabinan-specific alpha-1,2-arabinofuranosidase identified from screening the activities of bacterial GH43 glycoside hydrolases. *Journal of Biological Chemistry*, **2011**, 286, 15483-95	5.4	71
13	AXY8 encodes an α-Fucosidase, underscoring the importance of apoplastic metabolism on the fine structure of Arabidopsis cell wall polysaccharides. *Plant Cell*, **2011**, 23, 4025-40	11.6	64
12	Moss and liverwort xyloglucans contain galacturonic acid and are structurally distinct from the xyloglucans synthesized by hornworts and vascular plants. *Glycobiology*, **2008**, 18, 891-904	5.8	113
11	Arabidopsis irregular xylem8 and irregular xylem9: implications for the complexity of glucuronoxylan biosynthesis. *Plant Cell*, **2007**, 19, 549-63	11.6	339
10	Structural analysis of xyloglucans in the primary cell walls of plants in the subclass Asteridae. *Carbohydrate Research*, **2005**, 340, 1826-40	2.9	175
9	Arabidopsis fragile fiber8, which encodes a putative glucuronyltransferase, is essential for normal secondary wall synthesis. *Plant Cell*, **2005**, 17, 3390-408	11.6	247
8	Loss of highly branched arabinans and debranching of rhamnogalacturonan I accompany loss of firm texture and cell separation during prolonged storage of apple. *Plant Physiology*, **2004**, 135, 1305-13	6.6	115

7	Role of apoplastic ascorbate and hydrogen peroxide in the control of cell growth in pine hypocotyls. *Plant and Cell Physiology*, **2004**, 45, 530-4	4.9	32
6	The galactose residues of xyloglucan are essential to maintain mechanical strength of the primary cell walls in Arabidopsis during growth. *Plant Physiology*, **2004**, 134, 443-51	6.6	102
5	The cell wall stiffening mechanism in Pinus pinaster Aiton: regulation by apoplastic levels of ascorbate and hydrogen peroxide. *Journal of the Science of Food and Agriculture*, **1999**, 79, 416-420	4.3	31
4	Autolysis Promotes the Extension Capacity of Zea mays Coleoptile Cell Walls in Response to Acid pH Solutions. *Plant and Cell Physiology*, **1999**, 40, 565-570	4.9	4
3	Sequential extraction of dehydrodiferulates shows heterogeneity in their degree of association with Zea mays coleoptile cell walls. *Phytochemical Analysis*, **1998**, 9, 141-144	3.4	1
2	A xyloglucan from persimmon fruit cell walls. *Phytochemistry*, **1998**, 48, 607-610	4	16
1	Changes in Dehydrodiferulic Acids and Peroxidase Activity against Ferulic Acid Associated with Cell Walls during Growth of Pinus pinaster Hypocotyl. *Plant Physiology*, **1996**, 111, 941-946	6.6	77