

# Peter Ulvskov

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8989214/publications.pdf>

Version: 2024-02-01

92  
papers

10,836  
citations

81900

39  
h-index

46799

89  
g-index

119  
all docs

119  
docs citations

119  
times ranked

13122  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hemicelluloses. Annual Review of Plant Biology, 2010, 61, 263-289.	18.7	2,218
2	Genome sequencing and analysis of the model grass <i>Brachypodium distachyon</i> . Nature, 2010, 463, 763-768.	27.8	1,685
3	The <i>Selaginella</i> Genome Identifies Genetic Changes Associated with the Evolution of Vascular Plants. Science, 2011, 332, 960-963.	12.6	794
4	The <i>Amborella</i> Genome and the Evolution of Flowering Plants. Science, 2013, 342, 1241089.	12.6	743
5	If Homogalacturonan Were a Side Chain of Rhamnogalacturonan I. Implications for Cell Wall Architecture. Plant Physiology, 2003, 132, 1781-1789.	4.8	527
6	The Chara Genome: Secondary Complexity and Implications for Plant Terrestrialization. Cell, 2018, 174, 448-464.e24.	28.9	420
7	The Cell Walls of Green Algae: A Journey through Evolution and Diversity. Frontiers in Plant Science, 2012, 3, 82.	3.6	319
8	O-Glycosylated Cell Wall Proteins Are Essential in Root Hair Growth. Science, 2011, 332, 1401-1403.	12.6	287
9	XAX1 from glycosyltransferase family 61 mediates xylosyltransfer to rice xylan. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17117-17122.	7.1	198
10	Pectin engineering: Modification of potato pectin by in vivo expression of an endo-1,4-beta-D-galactanase. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 7639-7644.	7.1	169
11	High-throughput screening of monoclonal antibodies against plant cell wall glycans by hierarchical clustering of their carbohydrate microarray binding profiles. Glycoconjugate Journal, 2008, 25, 37-48.	2.7	155
12	Modulation of plasma membrane H <sup>+</sup> -ATPase from oat roots by lysophosphatidylcholine, free fatty acids and phospholipase A2. Physiologia Plantarum, 1988, 74, 11-19.	5.2	131
13	Biophysical consequences of remodeling the neutral side chains of rhamnogalacturonan-II in tubers of transgenic potatoes. Planta, 2005, 220, 609-620.	3.2	124
14	<i>Arabidopsis thaliana</i> RGXT1 and RGXT2 Encode Golgi-Localized (1,3)- $\beta$ -D-Xylosyltransferases Involved in the Synthesis of Pectic Rhamnogalacturonan-II. Plant Cell, 2006, 18, 2593-2607.	6.6	121
15	Why Plants Were Terrestrial from the Beginning. Trends in Plant Science, 2016, 21, 96-101.	8.8	120
16	Phenolic cross-links: building and de-constructing the plant cell wall. Natural Product Reports, 2020, 37, 919-961.	10.3	111
17	Cell wall evolution and diversity. Frontiers in Plant Science, 2012, 3, 152.	3.6	99
18	Effect of detergents on the H <sup>+</sup> -ATPase activity of inside-out and right-side-out plant plasma membrane vesicles. Biochimica Et Biophysica Acta - Biomembranes, 1990, 1021, 133-140.	2.6	93

#	ARTICLE	IF	CITATIONS
19	Molecular characterization of two <i>Arabidopsis thaliana</i> glycosyltransferase mutants, <i>rra1</i> and <i>rra2</i> , which have a reduced residual arabinose content in a polymer tightly associated with the cellulosic wall residue. <i>Plant Molecular Biology</i> , 2007, 64, 439-451.	3.9	89
20	In muro fragmentation of the rhamnogalacturonan I backbone in potato ( <i>Solanum tuberosum</i> L.) results in a reduction and altered location of the galactan and arabinan side-chains and abnormal periderm development. <i>Plant Journal</i> , 2002, 30, 403-413.	5.7	86
21	Characterization of a Functional Soluble Form of a <i>Brassica napus</i> Membrane-Anchored Endo-1,4- $\beta$ -Glucanase Heterologously Expressed in <i>Pichia pastoris</i> . <i>Plant Physiology</i> , 2001, 127, 674-684.	4.8	84
22	A $\beta$ -glucuronosyltransferase from <i>Arabidopsis thaliana</i> involved in biosynthesis of type II arabinogalactan has a role in cell elongation during seedling growth. <i>Plant Journal</i> , 2013, 76, 1016-1029.	5.7	84
23	Approaches to understanding the functional architecture of the plant cell wall. <i>Phytochemistry</i> , 2001, 57, 811-821.	2.9	83
24	Isolation and characterisation of a pod dehiscence zone-specific polygalacturonase from <i>Brassica napus</i> . <i>Plant Molecular Biology</i> , 1996, 31, 517-527.	3.9	82
25	Evidence for land plant cell wall biosynthetic mechanisms in charophyte green algae. <i>Annals of Botany</i> , 2014, 114, 1217-1236.	2.9	80
26	Effects on Interfacial Properties and Cell Adhesion of Surface Modification by Pectic Hairy Regions. <i>Biomacromolecules</i> , 2004, 5, 2094-2104.	5.4	76
27	Ethylene biosynthesis in oilseed rape pods in relation to pod shatter. <i>Journal of Experimental Botany</i> , 1998, 49, 829-838.	4.8	70
28	Analysis of a dehiscence zone endo-polygalacturonase in oilseed rape ( <i>Brassica napus</i> ) and <i>Arabidopsis thaliana</i> : evidence for roles in cell separation in dehiscence and abscission zones, and in styler tissues during pollen tube growth. <i>Plant Molecular Biology</i> , 2001, 46, 469-479.	3.9	68
29	The Glycosyltransferase Repertoire of the Spikemoss <i>Selaginella moellendorffii</i> and a Comparative Study of Its Cell Wall. <i>PLoS ONE</i> , 2012, 7, e35846.	2.5	68
30	A Complementary Bioinformatics Approach to Identify Potential Plant Cell Wall Glycosyltransferase-Encoding Genes. <i>Plant Physiology</i> , 2004, 136, 2609-2620.	4.8	67
31	Identification of an algal xylan synthase indicates that there is functional orthology between algal and plant cell wall biosynthesis. <i>New Phytologist</i> , 2018, 218, 1049-1060.	7.3	67
32	Residue Specific Hydration of Primary Cell Wall Potato Pectin Identified by Solid-State $^{13}\text{C}$ Single-Pulse MAS and CP/MAS NMR Spectroscopy. <i>Biomacromolecules</i> , 2011, 12, 1844-1850.	5.4	59
33	Direct Interference with Rhamnogalacturonan I Biosynthesis in Golgi Vesicles. <i>Plant Physiology</i> , 2002, 129, 95-102.	4.8	57
34	Engineering Mammalian Mucin-type O-Glycosylation in Plants*. <i>Journal of Biological Chemistry</i> , 2012, 287, 11911-11923.	3.4	52
35	The role of auxin in cell separation in the dehiscence zone of oilseed rape pods. <i>Journal of Experimental Botany</i> , 1997, 48, 1423-1429.	4.8	46
36	Expression of mung bean pectin acetyl esterase in potato tubers: effect on acetylation of cell wall polymers and tuber mechanical properties. <i>Planta</i> , 2012, 236, 185-196.	3.2	45

#	ARTICLE	IF	CITATIONS
37	Functional characterisation of a putative rhamnogalacturonan II specific xylosyltransferase. FEBS Letters, 2008, 582, 3217-3222.	2.8	44
38	Large-scale extraction of rhamnogalacturonan I from industrial potato waste. Food Chemistry, 2012, 131, 1207-1216.	8.2	44
39	Amylose/cellulose nanofiber composites for all-natural, fully biodegradable and flexible bioplastics. Carbohydrate Polymers, 2021, 253, 117277.	10.2	43
40	Autohydrolysis of plant xylans by apoplastic expression of thermophilic bacterial endo-xylanases. Plant Biotechnology Journal, 2010, 8, 363-374.	8.3	40
41	Pectic arabinan side chains are essential for pollen cell wall integrity during pollen development. Plant Biotechnology Journal, 2014, 12, 492-502.	8.3	39
42	Cytokinins and leaf development in sweet pepper ( <i>Capsicum annuum</i> L.). Planta, 1992, 188, 70-77.	3.2	38
43	Examination of the dehiscence zone in soybean pods and isolation of a dehiscence-related endopolygalacturonase gene. Plant, Cell and Environment, 2002, 25, 479-490.	5.7	38
44	Metabolomic, Transcriptional, Hormonal, and Signaling Cross-Talk in Superroot2. Molecular Plant, 2010, 3, 192-211.	8.3	38
45	Mechanical Properties of Plant Cell Walls Probed by Relaxation Spectra. Plant Physiology, 2011, 155, 246-258.	4.8	38
46	Pea Border Cell Maturation and Release Involve Complex Cell Wall Structural Dynamics. Plant Physiology, 2017, 174, 1051-1066.	4.8	38
47	Two <i>Arabidopsis thaliana</i> genes, KOR2 and KOR3, which encode membrane-anchored endo-1,4-beta-D-glucanases, are differentially expressed in developing leaf trichomes and their support cells. Plant Molecular Biology, 2001, 46, 263-275.	3.9	37
48	The Cleavable N-terminal Domain of Plant Endopolygalacturonases from Clade B May Be Involved in a Regulated Secretion Mechanism. Journal of Biological Chemistry, 2001, 276, 35297-35304.	3.4	35
49	In vitro biosynthesis of 1,4-galactan attached to rhamnogalacturonan I. Planta, 2000, 210, 622-629.	3.2	34
50	Toward Stable Genetic Engineering of Human O-Glycosylation in Plants. Plant Physiology, 2012, 160, 450-463.	4.8	31
51	Sustainable production of cellulose nanofiber gels and paper from sugar beet waste using enzymatic pre-treatment. Carbohydrate Polymers, 2020, 230, 115581.	10.2	31
52	Classification, Naming and Evolutionary History of Glycosyltransferases from Sequenced Green and Red Algal Genomes. PLoS ONE, 2013, 8, e76511.	2.5	30
53	Identification and evolution of a plant cell wall specific glycoprotein glycosyl transferase, ExAD. Scientific Reports, 2017, 7, 45341.	3.3	29
54	Degradation of lignin aryl ether units in <i>Arabidopsis thaliana</i> expressing LigD, LigF and LigG from <i>Sphingomonas paucimobilis</i> SYK6. Plant Biotechnology Journal, 2017, 15, 581-593.	8.3	29

#	ARTICLE	IF	CITATIONS
55	Nanofibers Produced from Agro-Industrial Plant Waste Using Entirely Enzymatic Pretreatments. <i>Biomacromolecules</i> , 2019, 20, 443-453.	5.4	29
56	Assay and heterologous expression in <i>Pichia pastoris</i> of plant cell wall type-II membrane anchored glycosyltransferases. <i>Glycoconjugate Journal</i> , 2009, 26, 1235-1246.	2.7	25
57	Ancient origin of fucosylated xyloglucan in charophycean green algae. <i>Communications Biology</i> , 2021, 4, 754.	4.4	24
58	Plant Protein O-Arabinosylation. <i>Frontiers in Plant Science</i> , 2021, 12, 645219.	3.6	23
59	Simultaneous <i>in vivo</i> truncation of pectic side chains. <i>Transgenic Research</i> , 2009, 18, 961-969.	2.4	22
60	Efficacy of an intron-containing kanamycin resistance gene as a selectable marker in plant transformation. <i>Plant Cell Reports</i> , 2001, 20, 610-615.	5.6	21
61	Characterisation of the arabinose-rich carbohydrate composition of immature and mature marama beans ( <i>Tylosema esculentum</i> ). <i>Phytochemistry</i> , 2011, 72, 1466-1472.	2.9	20
62	Effect of nanocoating with rhamnogalacturonan on surface properties and osteoblasts response. <i>Journal of Biomedical Materials Research - Part A</i> , 2012, 100A, 654-664.	4.0	19
63	Golgi-localized exo-1,3-galactosidases involved in cell expansion and root growth in <i>Arabidopsis</i> . <i>Journal of Biological Chemistry</i> , 2020, 295, 10581-10592.	3.4	19
64	Solubilization of galactosyltransferase that synthesizes 1,4-galactan side chains in pectic rhamnogalacturonan I. <i>Physiologia Plantarum</i> , 2002, 114, 540-548.	5.2	18
65	Subcellular localization and topology of 1,4-galactosyltransferase that elongates 1,4-galactan side chains in rhamnogalacturonan I in potato. <i>Planta</i> , 2004, 218, 862-868.	3.2	18
66	Preparation and Properties of Antibodies against Indoleacetic Acid (IAA)-C5-BSA, a Novel Ring-Coupled IAA Antigen, as Compared to Two Other Types of IAA-Specific Antibodies. <i>Plant Physiology</i> , 1989, 89, 1071-1078.	4.8	17
67	Expression of a membrane-anchored endo-1,4-beta-glucanase from <i>Brassica napus</i> , orthologous to KOR from <i>Arabidopsis thaliana</i> , is inversely correlated to elongation in light-grown plants. <i>Plant Molecular Biology</i> , 2001, 45, 93-105.	3.9	17
68	Selective Enzymatic Release and Gel Formation by Cross-Linking of Feruloylated Glucurono-Arabinoxylan from Corn Bran. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 8164-8174.	6.7	17
69	Cytokinins and leaf development in sweet pepper ( <i>Capsicum annuum</i> L.). <i>Planta</i> , 1992, 188, 78-84.	3.2	16
70	Affecting osteoblastic responses with <i>in vivo</i> engineered potato pectin fragments. <i>Journal of Biomedical Materials Research - Part A</i> , 2012, 100A, 111-119.	4.0	16
71	Immunoaffinity Purification of Indole-3-acetamide Using Monoclonal Antibodies. <i>Plant and Cell Physiology</i> , 1987, 28, 937-945.	3.1	15
72	Cytokinins and leaf development in sweet pepper ( <i>Capsicum annuum</i> L.). <i>Planta</i> , 1992, 188, 70-7.	3.2	15

#	ARTICLE	IF	CITATIONS
73	Cytokinins and leaf development in sweet pepper ( <i>Capsicum annuum</i> L.). <i>Planta</i> , 1992, 188, 78-84.	3.2	14
74	Immunoaffinity purification using monoclonal antibodies for the isolation of indole auxins from elongation zones of epicotyls of red-light-grown Alaska peas. <i>Planta</i> , 1992, 188, 182-189.	3.2	14
75	Rhamnogalacturonan-I Based Microcapsules for Targeted Drug Release. <i>PLoS ONE</i> , 2016, 11, e0168050.	2.5	13
76	Ethylene biosynthesis in oilseed rape pods in relation to pod shatter. <i>Journal of Experimental Botany</i> , 1998, 49, 829-838.	4.8	13
77	Metabolism of polysaccharides in dynamic middle lamellae during cotton fibre development. <i>Planta</i> , 2019, 249, 1565-1581.	3.2	11
78	Remodelling Pectin Structure In Potato. <i>Developments in Plant Genetics and Breeding</i> , 2000, 6, 245-256.	0.6	10
79	Extensin arabinoside chain length is modulated in elongating cotton fibre. <i>Cell Surface</i> , 2019, 5, 100033.	3.0	9
80	Analytical implications of different methods for preparing plant cell wall material. <i>Carbohydrate Polymers</i> , 2021, 261, 117866.	10.2	9
81	Expression of a fungal endo- $\alpha$ -1,5-l-arabinanase during stolon differentiation in potato inhibits tuber formation and results in accumulation of starch and tuber-specific transcripts in the stem. <i>Plant Science</i> , 2005, 169, 872-881.	3.6	8
82	The structurally effect of surface coated rhamnogalacturonan I on response of the osteoblast-like cell line SaOS-2. <i>Journal of Biomedical Materials Research - Part A</i> , 2014, 102, 1961-1971.	4.0	8
83	<i>Penium margaritaceum</i> as a Model Organism for Cell Wall Analysis of Expanding Plant Cells. <i>Methods in Molecular Biology</i> , 2015, 1242, 1-21.	0.9	7
84	The role of cellulase in hormonal regulation of shoot morphogenesis in tobacco callus. <i>Planta</i> , 1995, 196, 727-731.	3.2	5
85	Towards Unravelling the Biological Significance of the Individual Components of Pectic Hairy Regions in Plants. , 2003, , 15-34.		5
86	Hormonal and Phenolic Changes Accompanying and Following UV-C Induced Stress in <i>Spathiphyllum</i> leaves. <i>Journal of Plant Physiology</i> , 1987, 130, 291-306.	3.5	4
87	A New Polysaccharide with a Long Evolutionary History. <i>Plant Cell</i> , 2018, 30, 1165-1166.	6.6	4
88	Dehiscence. , 0, , 137-163.		3
89	Array-based microfibril surface assessment (AMSA): a method for probing surface-exposed polysaccharides on cellulose nanofibres. <i>Cellulose</i> , 2020, 27, 8635-8651.	4.9	3
90	Cellulose Nanofibrils as Assay Substrates for Cellulases and Lytic Polysaccharide Monooxygenases. <i>ACS Applied Nano Materials</i> , 2020, 3, 6729-6736.	5.0	2

#	ARTICLE	IF	CITATIONS
91	Cell walls have a new family. <i>Nature Plants</i> , 2018, 4, 635-636.	9.3	1
92	Chemical Synthesis of L-Fucose Derivatives for Acceptor Specificity Characterisation of Plant Cell Wall Glycosyltransferases. <i>ChemistrySelect</i> , 2017, 2, 997-1007.	1.5	0