

GrÃ©gory Mouille

List of Publications by Year in descending order

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93
papers

7,907
citations

47006

47
h-index

53230

85
g-index

96
all docs

96
docs citations

96
times ranked

8374
citing authors

#	ARTICLE	IF	CITATIONS
1	PROCUSTE1 Encodes a Cellulose Synthase Required for Normal Cell Elongation Specifically in Roots and Dark-Grown Hypocotyls of Arabidopsis. <i>Plant Cell</i> , 2000, 12, 2409-2423.	6.6	530
2	From Glycogen to Amylopectin: A Model for the Biogenesis of the Plant Starch Granule. <i>Cell</i> , 1996, 86, 349-352.	28.9	445
3	Homogalacturonan Methyl-Esterification and Plant Development. <i>Molecular Plant</i> , 2009, 2, 851-860.	8.3	365
4	CINNAMYL ALCOHOL DEHYDROGENASE-C and -D Are the Primary Genes Involved in Lignin Biosynthesis in the Floral Stem of Arabidopsis. <i>Plant Cell</i> , 2005, 17, 2059-2076.	6.6	346
5	PIN Polarity Maintenance by the Cell Wall in Arabidopsis. <i>Current Biology</i> , 2011, 21, 338-343.	3.9	336
6	QUASIMODO1 Encodes a Putative Membrane-Bound Glycosyltransferase Required for Normal Pectin Synthesis and Cell Adhesion in Arabidopsis. <i>Plant Cell</i> , 2002, 14, 2577-2590.	6.6	331
7	Arabidopsis Phyllotaxis Is Controlled by the Methyl-Esterification Status of Cell-Wall Pectins. <i>Current Biology</i> , 2008, 18, 1943-1948.	3.9	302
8	The Transcription Factor WIN1/SHN1 Regulates Cutin Biosynthesis in Arabidopsis thaliana. <i>Plant Cell</i> , 2007, 19, 1278-1294.	6.6	266
9	Classification and identification of Arabidopsis cell wall mutants using Fourier-Transform InfraRed (FT-IR) microspectroscopy. <i>Plant Journal</i> , 2003, 35, 393-404.	5.7	247
10	Homogalacturonan synthesis in Arabidopsis thaliana requires a Golgi-localized protein with a putative methyltransferase domain. <i>Plant Journal</i> , 2007, 50, 605-614.	5.7	204
11	Plant Cell Wall Homeostasis Is Mediated by Brassinosteroid Feedback Signaling. <i>Current Biology</i> , 2012, 22, 1732-1737.	3.9	201
12	The Arabidopsis leucine-rich repeat receptor kinase MIK2/LRR-KISS connects cell wall integrity sensing, root growth and response to abiotic and biotic stresses. <i>PLoS Genetics</i> , 2017, 13, e1006832.	3.5	187
13	A role for pectin deâ€methyl-esterification in a developmentally regulated growth acceleration in darkâ€grown Arabidopsis hypocotyls. <i>New Phytologist</i> , 2010, 188, 726-739.	7.3	147
14	Abscisic Acid Deficiency Causes Changes in Cuticle Permeability and Pectin Composition That Influence Tomato Resistance to <i>Botrytis cinerea</i> . <i>Plant Physiology</i> , 2010, 154, 847-860.	4.8	140
15	Biosynthesis and incorporation of sideâ€chainâ€truncated lignin monomers to reduce lignin polymerization and enhance saccharification. <i>Plant Biotechnology Journal</i> , 2012, 10, 609-620.	8.3	140
16	A Naturally Occurring Mutation in an <i>Arabidopsis</i> Accession Affects a Î²-Galactosidase That Increases the Hydrophilic Potential of Rhamnogalacturonan I in Seed Mucilage. <i>Plant Cell</i> , 2008, 19, 3990-4006.	6.6	123
17	Disruption of the Sugar Transporters AtSWEET11 and AtSWEET12 Affects Vascular Development and Freezing Tolerance in Arabidopsis. <i>Molecular Plant</i> , 2015, 8, 1687-1690.	8.3	121
18	The Auxin-Regulated CrRLK1L Kinase ERULUS Controls Cell Wall Composition during Root Hair Tip Growth. <i>Current Biology</i> , 2018, 28, 722-732.e6.	3.9	113

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19	<i>Trans</i> -Golgi Network Localized ECHIDNA/Ypt Interacting Protein Complex Is Required for the Secretion of Cell Wall Polysaccharides in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2013, 25, 2633-2646.	6.6	111
20	<i>Arabidopsis</i> <i>XXT5</i> gene encodes a putative β -1,6-xylotransferase that is involved in xyloglucan biosynthesis. <i>Plant Journal</i> , 2008, 56, 101-115.	5.7	109
21	β -Aminobutyric acid transaminase deficiency impairs central carbon metabolism and leads to cell wall defects during salt stress in <i>Arabidopsis</i> roots. <i>Plant, Cell and Environment</i> , 2013, 36, 1009-1018.	5.7	109
22	<i>Arabidopsis</i> leucine-rich repeat extensin (LRX) proteins modify cell wall composition and influence plant growth. <i>BMC Plant Biology</i> , 2015, 15, 155.	3.6	109
23	Preamylopectin Processing: A Mandatory Step for Starch Biosynthesis in Plants. <i>Plant Cell</i> , 1996, 8, 1353.	6.6	100
24	Oligogalacturonide production upon <i>Arabidopsis thaliana</i> - <i>Botrytis cinerea</i> interaction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 19743-19752.	7.1	100
25	Genetic and Biochemical Evidence for the Involvement of β -1,4 Glucanotransferases in Amylopectin Synthesis1. <i>Plant Physiology</i> , 1999, 120, 993-1004.	4.8	97
26	The Localization and Expression of the Class II Starch Synthases of Wheat1. <i>Plant Physiology</i> , 1999, 120, 1147-1156.	4.8	96
27	Scavenging Iron: A Novel Mechanism of Plant Immunity Activation by Microbial Siderophores. <i>Plant Physiology</i> , 2014, 164, 2167-2183.	4.8	94
28	Phytochrome Regulation of Cellulose Synthesis in <i>Arabidopsis</i> . <i>Current Biology</i> , 2011, 21, 1822-1827.	3.9	87
29	Mutants in DEFECTIVE GLYCOSYLATION, an <i>Arabidopsis</i> homolog of an oligosaccharyltransferase complex subunit, show protein underglycosylation and defects in cell differentiation and growth. <i>Plant Journal</i> , 2005, 42, 455-468.	5.7	81
30	Biochemical Characterization of the <i>Chlamydomonas reinhardtii</i> β -1,4 Glucanotransferase Supports a Direct Function in Amylopectin Biosynthesis1. <i>Plant Physiology</i> , 1999, 120, 1005-1014.	4.8	80
31	ESKIMO1 Disruption in <i>Arabidopsis</i> Alters Vascular Tissue and Impairs Water Transport. <i>PLoS ONE</i> , 2011, 6, e16645.	2.5	80
32	A galactosyltransferase acting on arabinogalactan protein glycans is essential for embryo development in <i>Arabidopsis</i> . <i>Plant Journal</i> , 2013, 76, 128-137.	5.7	80
33	Assessing the Metabolic Impact of Nitrogen Availability Using a Compartmentalized Maize Leaf Genome-Scale Model. <i>Plant Physiology</i> , 2014, 166, 1659-1674.	4.8	80
34	<i>Arabidopsis</i> PECTIN METHYLESTERASE17 is co-expressed with and processed by SBT3.5, a subtilisin-like serine protease. <i>Annals of Botany</i> , 2014, 114, 1161-1175.	2.9	79
35	Novel, Starch-Like Polysaccharides Are Synthesized by an Unbound Form of Granule-Bound Starch Synthase in Glycogen-Accumulating Mutants of <i>Chlamydomonas reinhardtii</i> . <i>Plant Physiology</i> , 1999, 119, 321-330.	4.8	73
36	The mechanism and regulation of cellulose synthesis in primary walls: lessons from cellulose-deficient <i>Arabidopsis</i> mutants. <i>Cellulose</i> , 2004, 11, 351-364.	4.9	72

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37	Expression of fungal acetyl xylan esterase in <i>Arabidopsis thaliana</i> improves saccharification of stem lignocellulose. <i>Plant Biotechnology Journal</i> , 2016, 14, 387-397.	8.3	72
38	AUXIN BINDING PROTEIN1 Links Cell Wall Remodeling, Auxin Signaling, and Cell Expansion in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2014, 26, 280-295.	6.6	71
39	LACCASE5 Is Required for Lignification of the <i>Brachypodium distachyon</i> Culm. <i>Plant Physiology</i> , 2015, 168, 192-204.	4.8	71
40	The transcription factor BELLRINGER modulates phyllotaxis by regulating the expression of a pectin methylesterase in <i>Arabidopsis</i> . <i>Development (Cambridge)</i> , 2011, 138, 4733-4741.	2.5	68
41	Identification of pectin methylesterase 3 as a basic pectin methylesterase isoform involved in adventitious rooting in <i>Arabidopsis thaliana</i> . <i>New Phytologist</i> , 2011, 192, 114-126.	7.3	67
42	Cell adhesion in plants is under the control of putative O-fucosyltransferases. <i>Development (Cambridge)</i> , 2016, 143, 2536-40.	2.5	62
43	Specialized phenolic compounds in seeds: structures, functions, and regulations. <i>Plant Science</i> , 2020, 296, 110471.	3.6	62
44	Reduced Number of Homogalacturonan Domains in Pectins of an <i>Arabidopsis</i> Mutant Enhances the Flexibility of the Polymer. <i>Biomacromolecules</i> , 2008, 9, 1454-1460.	5.4	61
45	Mitochondrial Defects Confer Tolerance against Cellulose Deficiency. <i>Plant Cell</i> , 2016, 28, 2276-2290.	6.6	57
46	Biochemical Characterization of Wild-Type and Mutant Isoamylases of <i>Chlamydomonas reinhardtii</i> Supports a Function of the Multimeric Enzyme Organization in Amylopectin Maturation. <i>Plant Physiology</i> , 2001, 125, 1723-1731.	4.8	54
47	High nitrogen fertilization and stem leaning have overlapping effects on wood formation in poplar but invoke largely distinct molecular pathways. <i>Tree Physiology</i> , 2010, 30, 1273-1289.	3.1	52
48	Downregulation of <i>RWA</i> genes in hybrid aspen affects xylan acetylation and wood saccharification. <i>New Phytologist</i> , 2017, 214, 1491-1505.	7.3	50
49	Pectin May Hinder the Unfolding of Xyloglucan Chains during Cell Deformation: Implications of the Mechanical Performance of <i>Arabidopsis</i> Hypocotyls with Pectin Alterations. <i>Molecular Plant</i> , 2009, 2, 990-999.	8.3	48
50	Purification, Cloning and Functional Characterization of an Endogenous beta-Glucuronidase in <i>Arabidopsis thaliana</i> . <i>Plant and Cell Physiology</i> , 2008, 49, 1331-1341.	3.1	46
51	Two Loci Control Phytoglycogen Production in the Monocellular Green Alga <i>Chlamydomonas reinhardtii</i> . <i>Plant Physiology</i> , 2001, 125, 1710-1722.	4.8	45
52	Guanosine tetraphosphate modulates salicylic acid signalling and the resistance of <i>Arabidopsis thaliana</i> to <i>Turnip mosaic virus</i> . <i>Molecular Plant Pathology</i> , 2018, 19, 634-646.	4.2	42
53	Arabinogalactan Glycosyltransferases Target to a Unique Subcellular Compartment That May Function in Unconventional Secretion in Plants. <i>Traffic</i> , 2014, 15, 1219-1234.	2.7	41
54	Xyloglucan Metabolism Differentially Impacts the Cell Wall Characteristics of the Endosperm and Embryo during <i>Arabidopsis</i> Seed Germination. <i>Plant Physiology</i> , 2016, 170, 1367-1380.	4.8	41

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55	Quantitative Trait Loci Analysis of Primary Cell Wall Composition in Arabidopsis. <i>Plant Physiology</i> , 2006, 141, 1035-1044.	4.8	39
56	The miR166â€“SIHB15A regulatory module controls ovule development and parthenocarpic fruit set under adverse temperatures in tomato. <i>Molecular Plant</i> , 2021, 14, 1185-1198.	8.3	39
57	Storage, Photosynthesis, and Growth: The Conditional Nature of Mutations Affecting Starch Synthesis and Structure in <i>Chlamydomonas</i> . <i>Plant Cell</i> , 1995, 7, 1117.	6.6	38
58	Pea Border Cell Maturation and Release Involve Complex Cell Wall Structural Dynamics. <i>Plant Physiology</i> , 2017, 174, 1051-1066.	4.8	38
59	Proline-rich protein-like PRPL1 controls elongation of root hairs in <i>Arabidopsis thaliana</i> . <i>Journal of Experimental Botany</i> , 2014, 65, 5485-5495.	4.8	37
60	SYNERGISTIC ON AUXIN AND CYTOKININ 1 positively regulates growth and attenuates soil pathogen resistance. <i>Nature Communications</i> , 2020, 11, 2170.	12.8	34
61	Cellular and Pectin Dynamics during Abscission Zone Development and Ripe Fruit Abscission of the Monocot Oil Palm. <i>Frontiers in Plant Science</i> , 2016, 7, 540.	3.6	32
62	Influence of chemical treatments of miscanthus stem fragments on polysaccharide release in the presence of cement and on the mechanical properties of bio-based concrete materials. <i>Cement and Concrete Composites</i> , 2020, 105, 103429.	10.7	31
63	Cell Expansion-Mediated Organ Growth Is Affected by Mutations in Three EXIGUA Genes. <i>PLoS ONE</i> , 2012, 7, e36500.	2.5	28
64	The debranching enzyme complex missing in glycogen accumulating mutants of <i>Chlamydomonas reinhardtii</i> displays an isoamylase-type specificity. <i>Plant Science</i> , 2000, 157, 145-156.	3.6	27
65	Suppression of Dwarf and <i>irregular xylem</i> Phenotypes Generates Low-Acetylated Biomass Lines in <i>Arabidopsis</i> . <i>Plant Physiology</i> , 2015, 168, 452-463.	4.8	27
66	Xyloglucans and Microtubules Synergistically Maintain Meristem Geometry and Phyllotaxis. <i>Plant Physiology</i> , 2019, 181, 1191-1206.	4.8	26
67	A SWI/SNF Chromatin Remodelling Protein Controls Cytokinin Production through the Regulation of Chromatin Architecture. <i>PLoS ONE</i> , 2015, 10, e0138276.	2.5	25
68	Rice Sucrose Partitioning Mediated by a Putative Pectin Methyltransferase and Homogalacturonan Methylesterification. <i>Plant Physiology</i> , 2017, 174, 1595-1608.	4.8	25
69	<i>Arabidopsis thaliana</i> plants lacking the ARP2/3 complex show defects in cell wall assembly and auxin distribution. <i>Annals of Botany</i> , 2018, 122, 777-789.	2.9	25
70	Evidence for the Regulation of Gynoecium Morphogenesis by <i>ETTIN</i> via Cell Wall Dynamics. <i>Plant Physiology</i> , 2018, 178, 1222-1232.	4.8	25
71	EB1 contributes to microtubule bundling and organization, along with root growth, in <i>Arabidopsis thaliana</i> . <i>Biology Open</i> , 2018, 7, .	1.2	23
72	Validated Method for Strigolactone Quantification by Ultra Highâ€“Performance Liquid Chromatography â€“ Electro spray Ionisation Tandem Mass Spectrometry Using Novel Deuterium Labelled Standards. <i>Phytochemical Analysis</i> , 2018, 29, 59-68.	2.4	22

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73	GDP-L-fucose is required for boundary definition in plants. <i>Journal of Experimental Botany</i> , 2017, 68, 5801-5811.	4.8	21
74	Combined enzymatic and metabolic analysis of grapevine cell responses to elicitors. <i>Plant Physiology and Biochemistry</i> , 2018, 123, 141-148.	5.8	20
75	The Tonoplastic Inositol Transporter INT1 From <i>Arabidopsis thaliana</i> Impacts Cell Elongation in a Sucrose-Dependent Way. <i>Frontiers in Plant Science</i> , 2018, 9, 1657.	3.6	15
76	Clone-Dependent Expression of Esca Disease Revealed by Leaf Metabolite Analysis. <i>Frontiers in Plant Science</i> , 2018, 9, 1960.	3.6	15
77	Quantification of guanosine triphosphate and tetraphosphate in plants and algae using stable isotope-labelled internal standards. <i>Talanta</i> , 2020, 219, 121261.	5.5	12
78	The peptide SCOOP12 acts on reactive oxygen species homeostasis to modulate cell division and elongation in <i>Arabidopsis</i> primary root. <i>Journal of Experimental Botany</i> , 2022, 73, 6115-6132.	4.8	12
79	Effects of <i>Arabidopsis</i> wall associated kinase mutations on ESMERALDA1 and elicitor induced ROS. <i>PLoS ONE</i> , 2021, 16, e0251922.	2.5	10
80	Xyloglucan Remodeling Defines Auxin-Dependent Differential Tissue Expansion in Plants. <i>International Journal of Molecular Sciences</i> , 2021, 22, 9222.	4.1	9
81	Influence of the radial stem composition on the thermal behaviour of miscanthus and sorghum genotypes. <i>Carbohydrate Polymers</i> , 2017, 167, 12-19.	10.2	8
82	CATION-CHLORIDE CO-TRANSPORTER 1 (CCC1) Mediates Plant Resistance against <i>Pseudomonas syringae</i> . <i>Plant Physiology</i> , 2020, 182, 1052-1065.	4.8	7
83	The Proline-Rich Family Protein EXTENSIN33 Is Required for Etiolated <i>Arabidopsis thaliana</i> Hypocotyl Growth. <i>Plant and Cell Physiology</i> , 2020, 61, 1191-1203.	3.1	7
84	An easier analysis of complex mixtures with highly resolved and sensitivity enhanced 2D quantitative NMR: application to tracking sugar phosphates in plants. <i>Analytical Methods</i> , 2017, 9, 2328-2333.	2.7	6
85	Overexpression of a Cytochrome P450 Monooxygenase Involved in Orobanchol Biosynthesis Increases Susceptibility to <i>Fusarium</i> Head Blight. <i>Frontiers in Plant Science</i> , 2021, 12, 662025.	3.6	6
86	Thermal and dynamic mechanical characterization of miscanthus stem fragments: Effects of genotypes, positions along the stem and their relation with biochemical and structural characteristics. <i>Industrial Crops and Products</i> , 2020, 156, 112863.	5.2	5
87	Mutation of an <i>arabidopsis</i> golgi membrane protein ELMO1 reduces cell adhesion. <i>Development (Cambridge)</i> , 2021, 148, .	2.5	5
88	Parenchyma cell wall structure in twining stem of <i>Dioscorea balcanica</i> . <i>Cellulose</i> , 2017, 24, 4653-4669.	4.9	4
89	Pectin Dependent Cell Adhesion Restored by a Mutant Microtubule Organizing Membrane Protein. <i>Plants</i> , 2021, 10, 690.	3.5	4
90	Cell adhesion in plants is under the control of putative O-fucosyltransferases. <i>Journal of Cell Science</i> , 2016, 129, e1.2-e1.2.	2.0	3

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91	Variations in cell wall monosaccharide composition during seed development in <i>Coffea arabica</i> L. Comparison between <i>Coffea arabica</i> var. Bourbon and <i>Coffea arabica</i> var. Laurina. <i>Trees - Structure and Function</i> , 2015, 29, 1871-1881.	1.9	2
92	Comparison between <i>Coffea arabica</i> L. "Laurina"™ and <i>C. arabica</i> "Bourbon"™ seedlings grown in daylight or darkness for their polysaccharidic cell wall composition and caffeine and chlorogenic acid contents. <i>Trees - Structure and Function</i> , 2016, 30, 665-674.	1.9	2
93	One-step preparation procedure, mechanical properties and environmental performances of miscanthus-based concrete blocks. <i>Materials Today Communications</i> , 2022, 31, 103575.	1.9	0