JÃ©rÃ´me Pelloux

List of Publications by Year
in descending order

46 papers	7,212 citations	172457 29 h-index	233421 45 g-index
51 all docs	51 docs citations	51 times ranked	8471 citing authors

#	Article	IF	Citations
1	Calcium at the Crossroads of Signaling. Plant Cell, 2002, 14, S401-S417.	6.6	1,076
2	Cell Wall Metabolism in Response to Abiotic Stress. Plants, 2015, 4, 112-166.	3.5	883
3	New insights into pectin methylesterase structure and function. Trends in Plant Science, 2007, 12, 267-277.	8.8	676
4	The lack of a systematic validation of reference genes: a serious pitfall undervalued in reverse transcriptionâ€polymerase chain reaction (RTâ€PCR) analysis in plants. Plant Biotechnology Journal, 2008, 6, 609-618.	8.3	613
5	The vacuolar Ca2+-activated channel TPC1 regulates germination and stomatal movement. Nature, 2005, 434, 404-408.	27.8	490
6	Normalization of qRT-PCR data: the necessity of adopting a systematic, experimental conditions-specific, validation of references. Journal of Experimental Botany, 2009, 60, 487-493.	4.8	481
7	Homogalacturonan Methyl-Esterification and Plant Development. Molecular Plant, 2009, 2, 851-860.	8.3	365
8	Arabidopsis Phyllotaxis Is Controlled by the Methyl-Esterification Status of Cell-Wall Pectins. Current Biology, 2008, 18, 1943-1948.	3.9	302
9	Homogalacturonan-modifying enzymes: structure, expression, and roles in plants. Journal of Experimental Botany, 2014, 65, 5125-5160.	4.8	242
10	Tuning of pectin methylesterification: consequences for cell wall biomechanics and development. Planta, 2015, 242, 791-811.	3.2	199
11	Connecting Homogalacturonan-Type Pectin Remodeling to Acid Growth. Trends in Plant Science, 2017, 22, 20-29.	8.8	189
12	Towards a Systematic Validation of References in Real-Time RT-PCR. Plant Cell, 2008, 20, 1734-1735.	6.6	186
13	A role for pectin deâ€methylesterification in a developmentally regulated growth acceleration in darkâ€grown Arabidopsis hypocotyls. New Phytologist, 2010, 188, 726-739.	7.3	147
14	Comprehensive expression profiling of the pectin methylesterase gene family during silique development in Arabidopsis thaliana. Planta, 2006, 224, 782-791.	3.2	131
15	Oligogalacturonide production upon <i>Arabidopsis thaliana</i> â€“ <i>Botrytis cinerea</i> interaction. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19743-19752.	7.1	100
16	PECTIN METHYLESTERASE48 Is Involved in Arabidopsis Pollen Grain Germination Â. Plant Physiology, 2015, 167, 367-380.	4.8	97
17	Cell wall compositional modifications of Miscanthus ecotypes in response to cold acclimation. Phytochemistry, 2013, 85, 51-61.	2.9	80
18	Arabidopsis PECTIN METHYLESTERASE17 is co-expressed with and processed by SBT3.5, a subtilisin-like serine protease. Annals of Botany, 2014, 114, 1161-1175.	2.9	79

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19	Structural alteration of cell wall pectins accompanies pea development in response to cold. Phytochemistry, 2014, 104, 37-47.	2.9	75
20	The transcription factor BELLRINGER modulates phyllotaxis by regulating the expression of a pectin methylesterase in <i>Arabidopsis</i>. Development (Cambridge), 2011, 138, 4733-4741.	2.5	68
21	Identification of pectin methylesterase 3 as a basic pectin methylesterase isoform involved in adventitious rooting in <i>Arabidopsis thaliana</i>. New Phytologist, 2011, 192, 114-126.	7.3	67
22	Symplastic connection is required for bud outgrowth following dormancy in potato (Solanum) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622	5.7	66
23	Plant pectin acetylesterase structure and function: new insights from bioinformatic analysis. BMC Genomics, 2017, 18, 456.	2.8	60
24	The cell wall pectic polymer rhamnogalacturonan-II is required for proper pollen tube elongation: implications of a putative sialyltransferase-like protein. Annals of Botany, 2014, 114, 1177-1188.	2.9	52
25	Tuning of Pectin Methylesterification. Journal of Biological Chemistry, 2015, 290, 23320-23335.	3.4	52
26	Combined Experimental and Computational Approaches Reveal Distinct pH Dependence of Pectin Methylesterase Inhibitors. Plant Physiology, 2017, 173, 1075-1093.	4.8	48
27	Arabidopsis PME17 Activity can be Controlled by Pectin Methylesterase Inhibitor4. Plant Signaling and Behavior, 2015, 10, e983351.	2.4	42
28	Purification and characterisation of a novel starch synthase selective for uridine 5â€²-diphosphate glucose from the red alga Gracilaria tenuistipitata. Planta, 1999, 209, 143-152.	3.2	40
29	The subtilisin-like protease SBT3 contributes to insect resistance in tomato. Journal of Experimental Botany, 2016, 67, 4325-4338.	4.8	35
30	Major changes in the cell wall during silique development in Arabidopsis thaliana. Phytochemistry, 2011, 72, 59-67.	2.9	33
31	The exogenous application of AtPGLR, an <i>endo</i>â€polygalacturonase, triggers pollen tube burst and repair. Plant Journal, 2020, 103, 617-633.	5.7	28
32	Evidence for the Regulation of Gynoecium Morphogenesis by <i>ETTIN</i> via Cell Wall Dynamics. Plant Physiology, 2018, 178, 1222-1232.	4.8	25
33	NMRâ€based Metabolomics to Study the Coldâ€acclimation Strategy of Two <i>Miscanthus</i> Genotypes. Phytochemical Analysis, 2017, 28, 58-67.	2.4	21
34	Kiwi fruit PMEI inhibits PME activity, modulates root elongation and induces pollen tube burst in Arabidopsis thaliana. Plant Growth Regulation, 2014, 74, 285-297.	3.4	20
35	Structural and dynamical characterization of the pH-dependence of the pectin methylesteraseâ€“pectin methylesterase inhibitor complex. Journal of Biological Chemistry, 2017, 292, 21538-21547.	3.4	19
36	AtPME3, a ubiquitous cell wall pectin methylesterase of Arabidopsis thaliana, alters the metabolism of cruciferin seed storage proteins during post-germinative growth of seedlings. Journal of Experimental Botany, 2017, 68, 1083-1095.	4.8	17

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37	Three novel rhamnogalacturonan I- pectins degrading enzymes from Aspergillus aculeatinus: Biochemical characterization and application potential. Carbohydrate Polymers, 2020, 248, 116752.	10.2	17
38	Substrate specificity of plant and fungi pectin methylesterases: Identification of novel inhibitors of PMEs. International Journal of Biological Macromolecules, 2015, 81, 681-691.	7.5	15
39	New insights into the specificity and processivity of two novel pectinases from Verticillium dahliae. International Journal of Biological Macromolecules, 2021, 176, 165-176.	7.5	15
40	The pectinases from Sphenophorus levis: Potential for biotechnological applications. International Journal of Biological Macromolecules, 2018, 112, 499-508.	7.5	14
41	Analysis of LuPME3, a pectin methylesterase from Linum usitatissimum, revealed a variability in PME proteolytic maturation. Plant Signaling and Behavior, 2012, 7, 59-61.	2.4	10
42	Characterization of a novel strain of Aspergillus aculeatinus: From rhamnogalacturonan type I pectin degradation to improvement of fruit juice filtration. Carbohydrate Polymers, 2021, 262, 117943.	10.2	9
43	Pectin Degrading Enzymes. , 2020, , 37-60.		9
44	New insights into diet breadth of polyphagous and oligophagous aphids on two <i>Arabidopsis</i> ecotypes. Insect Science, 2019, 26, 753-769.	3.0	6
45	Lactose derivatives as potential inhibitors of pectin methylesterases. International Journal of Biological Macromolecules, 2019, 132, 1140-1146.	7.5	4
46	In situ ESEM using 3-D printed and adapted accessories to observe living plantlets and their interaction with enzyme and fungus. Micron, 2022, 153, 103185.	2.2	1