Cecile Herve

List of Publications by Citations

36 papers	2,220 citations	20 h-index	37 g-index
37 ext. papers	2,722 ext. citations	5.8 avg, IF	4.49 L-index

#	Paper	IF	Citations
36	Evolution and diversity of plant cell walls: from algae to flowering plants. *Annual Review of Plant Biology*, **2011**, 62, 567-90	30.7	455
35	Pectic homogalacturonan masks abundant sets of xyloglucan epitopes in plant cell walls. *BMC Plant Biology*, **2008**, 8, 60	5.3	291
34	Genome structure and metabolic features in the red seaweed Chondrus crispus shed light on evolution of the Archaeplastida. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 5247-52	11.5	239
33	Carbohydrate-binding modules promote the enzymatic deconstruction of intact plant cell walls by targeting and proximity effects. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 15293-8	11.5	177
32	Chemical and enzymatic fractionation of cell walls from Fucales: insights into the structure of the extracellular matrix of brown algae. *Annals of Botany*, **2014**, 114, 1203-16	4.1	164
31	A review about brown algal cell walls and fucose-containing sulfated polysaccharides: Cell wall context, biomedical properties and key research challenges. *Carbohydrate Polymers*, **2017**, 175, 395-408	10.3	132
30	Evidence that family 35 carbohydrate binding modules display conserved specificity but divergent function. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 3065-70	11.5	89
29	NADPH oxidases in Eukaryotes: red algae provide new hints!. *Current Genetics*, **2006**, 49, 190-204	2.9	73
28	Enzymatic treatments reveal differential capacities for xylan recognition and degradation in primary and secondary plant cell walls. *Plant Journal*, **2009**, 58, 413-22	6.9	68
27	Expression profiling of Chondrus crispus (Rhodophyta) after exposure to methyl jasmonate. *Journal of Experimental Botany*, **2006**, 57, 3869-81	7	52
26	Arabinogalactan proteins have deep roots in eukaryotes: identification of genes and epitopes in brown algae and their role in Fucus serratus embryo development. *New Phytologist*, **2016**, 209, 1428-41	9.8	48
25	Insoluble (1 -3), (1 -4)-D-glucan is a component of cell walls in brown algae (Phaeophyceae) and is masked by alginates in tissues. *Scientific Reports*, **2017**, 7, 2880	4.9	46
24	MARINE-EXPRESS: taking advantage of high throughput cloning and expression strategies for the post-genomic analysis of marine organisms. *Microbial Cell Factories*, **2010**, 9, 45	6.4	44
23	Monoclonal antibodies directed to fucoidan preparations from brown algae. *PLoS ONE*, **2015**, 10, e0118366	3.7	40
22	Monoclonal antibodies, carbohydrate-binding modules, and the detection of polysaccharides in plant cell walls. *Methods in Molecular Biology*, **2011**, 715, 103-13	1.4	40
21	Sweet and sour sugars from the sea: the biosynthesis and remodeling of sulfated cell wall polysaccharides from marine macroalgae. *Perspectives in Phycology*, **2015**, 2, 51-64	3.1	38
20	Evidence for oxylipin synthesis and induction of a new polyunsaturated fatty acid hydroxylase activity in Chondrus crispus in response to methyljasmonate. *Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids*, **2007**, 1771, 565-75	5	32

19	The cell-wall active mannuronan C5-epimerases in the model brown alga Ectocarpus: From gene context to recombinant protein. *Glycobiology*, **2016**, 26, 973-983	5.8	22
18	Chondrus crispus – A Present and Historical Model Organism for Red Seaweeds. *Advances in Botanical Research*, **2014**, 71, 53-89	2.2	22
17	Online coupling of high-resolution chromatography with extreme UV photon activation tandem mass spectrometry: Application to the structural investigation of complex glycans by dissociative photoionization. *Analytica Chimica Acta*, **2016**, 933, 1-9	6.6	20
16	High-energy photon activation tandem mass spectrometry provides unprecedented insights into the structure of highly sulfated oligosaccharides extracted from macroalgal cell walls. *Analytical Chemistry*, **2015**, 87, 1042-9	7.8	20
15	Dynamics of cell wall assembly during early embryogenesis in the brown alga Fucus. *Journal of Experimental Botany*, **2016**, 67, 6089-6100	7	20
14	New members of the glutathione transferase family discovered in red and brown algae. *Biochemical Journal*, **2008**, 412, 535-44	3.8	18
13	Discovery and screening of novel metagenome-derived GH107 enzymes targeting sulfated fucans from brown algae. *FEBS Journal*, **2018**, 285, 4281-4295	5.7	16
12	The genome of Ectocarpus subulatus - A highly stress-tolerant brown alga. *Marine Genomics*, **2020**, 52, 100740	1.9	14
11	Attachment, penetration and early host defense mechanisms during the infection of filamentous brown algae by Eurychasma dicksonii. *Protoplasma*, **2015**, 252, 845-56	3.4	11
10	Double blind microarray-based polysaccharide profiling enables parallel identification of uncharacterized polysaccharides and carbohydrate-binding proteins with unknown specificities. *Scientific Reports*, **2018**, 8, 2500	4.9	10
9	RT-qPCR normalization genes in the red alga Chondrus crispus. *PLoS ONE*, **2014**, 9, e86574	3.7	8
8	Microarray Glycan Profiling Reveals Algal Fucoidan Epitopes in Diverse Marine Metazoans. *Frontiers in Marine Science*, **2017**, 4,	4.5	3
7	The genome of Ectocarpus subulatus – a highly stress-tolerant brown alga		2
6	Monoclonal Antibodies, Carbohydrate-Binding Modules, and Detection of Polysaccharides in Cell Walls from Plants and Marine Algae. *Methods in Molecular Biology*, **2020**, 2149, 351-364	1.4	2
5	Isolation of Gametes and Cultivation of the Zygotes. *Bio-protocol*, **2017**, 7, e2408	0.9	1
4	Production and Bioassay of a Diffusible Factor That Induces Gametophyte-to-Sporophyte Developmental Reprogramming in the Brown Alga. *Bio-protocol*, **2020**, 10, e3753	0.9	1
3	Presence of Exogenous Sulfate Is Mandatory for Tip Growth in the Brown Alga. *Frontiers in Plant Science*, **2020**, 11, 1277	6.2	1
2	Biochemical characteristics of a diffusible factor that induces gametophyte to sporophyte switching in the brown alga Ectocarpus. *Journal of Phycology*, **2021**, 57, 742-753	3	1

1 Changes in Cell Wall Structure During Rhizoid Formation of Silvetia babingtonii (Fucales, Phaeophyceae) Zygotes. *Journal of Phycology*, **2021**, 57, 1356-1367 30