Sebastien C Carpentier

List of Publications by Year
in descending order

64	2,453	186265	214800
papers	citations	28 h-index	47 g-index

65	65	65	3411
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Proteome analysis of nonâ€model plants: A challenging but powerful approach. Mass Spectrometry Reviews, 2008, 27, 354-377.	5.4	180
2	Fine tuning of trehalose biosynthesis and hydrolysis as novel tools for the generation of abiotic stress tolerant plants. Frontiers in Plant Science, 2014, 5, 147.	3.6	145
3	Overexpression of the Trehalase Gene AtTRE1 Leads to Increased Drought Stress Tolerance in Arabidopsis and Is Involved in Abscisic Acid-Induced Stomatal Closure Â Â. Plant Physiology, 2013, 161, 1158-1171.	4.8	117
4	Plant Phenotyping Research Trends, a Science Mapping Approach. Frontiers in Plant Science, 2018, 9, 1933.	3.6	113
5	Banana (Musa spp.) as a model to study the meristem proteome: Acclimation to osmotic stress. Proteomics, 2007, 7, 92-105.	2.2	110
6	Addressing the Challenge of Defining Valid Proteomic Biomarkers and Classifiers. BMC Bioinformatics, 2010, 11, 594.	2.6	108
7	Screening the banana biodiversity for drought tolerance: can an in vitro growth model and proteomics be used as a tool to discover tolerant varieties and understand homeostasis. Frontiers in Plant Science, 2012, 3, 176.	3.6	96
8	Did backcrossing contribute to the origin of hybrid edible bananas?. Annals of Botany, 2010, 106, 849-857.	2.9	79
9	Proteomic analysis of core breakdown disorder in Conference pears (Pyrus communis L.). Proteomics, 2007, 7, 2083-2099.	2.2	74
10	The impact of slow stomatal kinetics on photosynthesis and water use efficiency under fluctuating light. Plant Physiology, 2021, 186, 998-1012.	4.8	71
11	A decade of plant proteomics and mass spectrometry: Translation of technical advancements to food security and safety issues. Mass Spectrometry Reviews, 2013, 32, 335-365.	5.4	70
12	The quest for tolerant varieties: the importance of integrating â€œomicsâ€•techniques to phenotyping. Frontiers in Plant Science, 2015, 6, 448.	3.6	67
13	Somatic Embryogenesis in Coffee: The Evolution of Biotechnology and the Integration of Omics Technologies Offer Great Opportunities. Frontiers in Plant Science, 2017, 8, 1460.	3.6	64
14	Structure and regulation of the Asr gene family in banana. Planta, 2011, 234, 785-798.	3.2	59
15	Treatment of missing values for multivariate statistical analysis of gelâ€based proteomics data. Proteomics, 2008, 8, 1371-1383.	2.2	56
16	Transpiration efficiency versus growth: Exploring the banana biodiversity for drought tolerance. Scientia Horticulturae, 2015, 185, 175-182.	3.6	53
17	Aggregating sequences that occur in many proteins constitute weak spots of bacterial proteostasis. Nature Communications, 2018, 9, 866.	12.8	53
18	Functional genomics in a non-model crop: transcriptomics or proteomics?. Physiologia Plantarum, 2008, 133, 117-130.	5.2	50

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19	Functional Proteome Analysis of the Banana Plant (Musa spp.) Using de Novo Sequence Analysis of Derivatized Peptides. Journal of Proteome Research, 2007, 6, 70-80.	3.7	49
20	Lyophilization, a Practical Way to Store and Transport Tissues Prior to Protein Extraction for 2DE Analysis?. Proteomics, 2007, 7, 64-69.	2.2	45
21	Improving the identification rate of data independent label-free quantitative proteomics experiments on non-model crops: A case study on apple fruit. Journal of Proteomics, 2014, 105, 31-45.	2.4	44
22	New insights into the heterogeneous ripening in Hass avocado via LCâ€“MS/MS proteomics. Postharvest Biology and Technology, 2017, 132, 51-61.	6.0	38
23	Integration of proteomics and metabolomics data of early and middle season Hass avocados under heat treatment. Food Chemistry, 2019, 289, 512-521.	8.2	35
24	Homeolog expression analysis in an allotriploid non-model crop via integration of transcriptomics and proteomics. Scientific Reports, 2018, 8, 1353.	3.3	34
25	The use of 2D-electrophoresis and de novo sequencing to characterize inter- and intra-cultivar protein polymorphisms in an allopolyploid crop. Phytochemistry, 2011, 72, 1243-1250.	2.9	33
26	Follicular fluid biomarkers for human in vitro fertilization outcome: Proof of principle. Proteome Science, 2016, 14, 17.	1.7	31
27	Sugar-Mediated Acclimation: The Importance of Sucrose Metabolism in Meristems. Journal of Proteome Research, 2010, 9, 5038-5046.	3.7	30
28	Identification of an enterovirus recombinant with a torovirus-like gene insertion during a diarrhea outbreak in fattening pigs. Virus Evolution, 2017, 3, vex024.	4.9	30
29	Autologous micrograft accelerates endogenous wound healing response through ERK-induced cell migration. Cell Death and Differentiation, 2020, 27, 1520-1538.	11.2	29
30	2â€Ð DIGE reveals changes in wheat xylanase inhibitor protein families due to Fusarium graminearum Î”Tri5 infection and grain development. Proteomics, 2010, 10, 2303-2319.	2.2	28
31	Challenges and solutions for the identification of membrane proteins in non-model plants. Journal of Proteomics, 2011, 74, 1165-1181.	2.4	28
32	The use of 2Dâ€ÐDIGE to understand the regeneration of somatic embryos in avocado. Proteomics, 2013, 13, 3498-3507.	2.2	25
33	Identification of lanthionine and lysinoalanine in heat-treated wheat gliadin and bovine serum albumin using tandem mass spectrometry with higher-energy collisional dissociation. Amino Acids, 2016, 48, 959-971.	2.7	25
34	Using Growth and Transpiration Phenotyping Under Controlled Conditions to Select Water Efficient Banana Genotypes. Frontiers in Plant Science, 2019, 10, 352.	3.6	25
35	Controlled transgene dosage and PAC-mediated transgenesis in mice using a chromosomal vector. Genomics, 2003, 82, 596-605.	2.9	24
36	The proteome profile of embryogenic cell suspensions of Coffea arabica L.. Proteomics, 2016, 16, 1001-1005.	2.2	22

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37	Identification of dimedone-trapped sulfenylated proteins in plants under stress. Biochemistry and Biophysics Reports, 2017, 9, 106-113.	1.3	21
38	The Enrichment ofHistomonas meleagridisand Its Pathogen-Specific Protein Analysis: A First Step to Shed Light on Its Virulence. Avian Diseases, 2016, 60, 628-636.	1.0	20
39	Genotype-Specific Growth and Proteomic Responses of Maize Toward Salt Stress. Frontiers in Plant Science, 2018, 9, 661.	3.6	20
40	Characterizing fruit ripening in plantain and Cavendish bananas: A proteomics approach. Journal of Proteomics, 2020, 214, 103632.	2.4	20
41	Problems inherent to a meta-analysis of proteomics data: A case study on the plants' response to Cd in different cultivation conditions. Journal of Proteomics, 2014, 108, 30-54.	2.4	19
42	A look behind the screens: Characterization of the HSP70 family during osmotic stress in a non-model crop. Journal of Proteomics, 2015, 119, 10-20.	2.4	19
43	A digital sensor to measure real-time leaf movements and detect abiotic stress in plants. Plant Physiology, 2021, 187, 1131-1148.	4.8	17
44	A quantitative portrait of three xylanase inhibiting protein families in different wheat cultivars using 2D-DIGE and multivariate statistical tools. Journal of Proteomics, 2009, 72, 484-500.	2.4	15
45	Unraveling tobacco BY-2 protein complexes with BN PAGE/LCâ€“MS/MS and clustering methods. Journal of Proteomics, 2011, 74, 1201-1217.	2.4	15
46	Distinct autophagy-apoptosis related pathways activated by Multi-walled (NM 400) and Single-walled carbon nanotubes (NIST-SRM2483) in human bronchial epithelial (16HBE14o-) cells. Journal of Hazardous Materials, 2020, 387, 121691.	12.4	15
47	In planta PCR-based detection of early infection of plant-parasitic nematodes in the roots: a step towards the understanding of infection and plant defence. European Journal of Plant Pathology, 2010, 128, 343-351.	1.7	14
48	Proteome Analysis of Orphan Plant Species, Fact or Fiction?. Methods in Molecular Biology, 2014, 1072, 333-346.	0.9	13
49	Data for the characterization of the HSP70 family during osmotic stress in banana, a non-model crop. Data in Brief, 2015, 3, 78-84.	1.0	10
50	Proteome Changes during Transition from Human Embryonic to Vascular Progenitor Cells. Journal of Proteome Research, 2016, 15, 1995-2007.	3.7	10
51	The Plantain Proteome, a Focus on Allele Specific Proteins Obtained from Plantain Fruits. Proteomics, 2018, 18, 1700227.	2.2	10
52	Dawn regulates guard cell proteins in Arabidopsis thaliana that function in ATP production from fatty acid beta-oxidation. Plant Molecular Biology, 2018, 98, 525-543.	3.9	10
53	Proteomic analysis of mashua (Tropaeolum tuberosum) tubers subjected to postharvest treatments. Food Chemistry, 2020, 305, 125485.	8.2	10
54	Breeding Climate-Resilient Bananas. , 2020, , 91-115.		10

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55	Influence of preâ€harvest calcium, potassium and triazole application on the proteome of apple at harvest. Journal of the Science of Food and Agriculture, 2016, 96, 4984-4993.	3.5	8
56	A digital catalog of highâ€density markers for banana germplasm collections. Plants People Planet, 2022, 4, 61-67.	3.3	7
57	dsRNA Molecules From the Tobacco Mosaic Virus p126 Gene Counteract TMV-Induced Proteome Changes at an Early Stage of Infection. Frontiers in Plant Science, 2021, 12, 663707.	3.6	7
58	The cryoprotectant PVS2 plays a crucial role in germinating Passiflora ligularis embryos after cryopreservation by influencing the mobilization of lipids and the antioxidant metabolism. Journal of Plant Physiology, 2019, 239, 71-82.	3.5	6
59	Identification of rye B chromosomeâ€associated peptides by mass spectrometry. New Phytologist, 2021, 230, 2179-2185.	7.3	6
60	Multiple Testing and Pattern Recognition in 2-DE Proteomics. Methods in Molecular Biology, 2016, 1384, 215-235.	0.9	4
61	Genome-wide BAC-end sequencing of Musa acuminata DH Pahang reveals further insights into the genome organization of banana. Tree Genetics and Genomes, 2011, 7, 933-940.	1.6	3
62	Abiotic Stress Tolerance Research Using-Omics Approaches. , 2016, , 77-91.		1
63	Proteomics analysis reveals new insights into surface pitting of sweet cherry cultivars displaying contrasting susceptibility. Journal of Horticultural Science and Biotechnology, 2022, 97, 615-625.	1.9	1
64	Role of Bioinformatics as a Tool. , 2012, , 194-216.		0