FrÃ©dÃ©ric Marsolais

List of Publications by Year
in descending order

70 papers	2,026 citations	236912 25 h-index	265191 42 g-index
76 all docs	76 docs citations	76 times ranked	2097 citing authors

#	Article	IF	Citations
1	Pectin acetylesterase 8 influences pectin acetylation in the seed coat, seed imbibition, and dormancy in common bean (<scp>Phaseolus vulgaris</scp> L.). , 2022, 4, e130.		4
2	Common bean (<scp>Phaseolus vulgaris</scp> L.) with increased cysteine and methionine concentration. , 2021, 3, e103.		7
3	LEAFY COTYLEDON1 expression in the endosperm enables embryo maturation in Arabidopsis. Nature Communications, 2021, 12, 3963.	12.8	24
4	Patterns of Genetic Variation in a Soybean Germplasm Collection as Characterized with Genotyping-by-Sequencing. Plants, 2021, 10, 1611.	3.5	6
5	Development of a Csy4-processed guide RNA delivery system with soybean-infecting virus ALSV for genome editing. BMC Plant Biology, 2021, 21, 419.	3.6	16
6	Evidence that class I glutamine amidotransferase, GAT1_2.1, acts as a glutaminase in roots of Arabidopsis thaliana. Plant Science, 2021, 312, 111033.	3.6	7
7	Evaluation of beneficial and inhibitory effects of nitrate on nodulation and nitrogen fixation in common bean (Phaseolus vulgaris). , 2020, 2, e45.		15
8	Label-free quantitative proteomic analysis of alfalfa in response to microRNA156 under high temperature. BMC Genomics, 2020, 21, 758.	2.8	8
9	Effects of Nitrogen Application on Nitrogen Fixation in Common Bean Production. Frontiers in Plant Science, 2020, 11, 1172.	3.6	49
10	Postharvest seed coat darkening in pinto bean (Phaseolus vulgaris) is regulated by P^{sd}, an allele of the basic helixâ€loopâ€helix transcription factor P. Plants People Planet, 2020, 2, 663-677.	3.3	13
11	Agronomic Performance and Nitrogen Fixation of Heirloom and Conventional Dry Bean Varieties Under Low-Nitrogen Field Conditions. Frontiers in Plant Science, 2019, 10, 952.	3.6	39
12	Distribution and possible biosynthetic pathway of non-protein sulfur amino acids in legumes. Journal of Experimental Botany, 2019, 70, 4115-4121.	4.8	6
13	RNA polymerase II-independent recruitment of SPT6L at transcription start sites in Arabidopsis. Nucleic Acids Research, 2019, 47, 6714-6725.	14.5	24
14	Common Bean (Phaseolus vulgaris L.) Accumulates Most S-Methylcysteine as Its Î³-Glutamyl Dipeptide. Plants, 2019, 8, 126.	3.5	6
15	Deciphering Sâ€methylcysteine biosynthesis in common bean by isotopic tracking with mass spectrometry. Plant Journal, 2019, 100, 176-186.	5.7	4
16	Agrobacterium â€mediated inoculation of asymptomatic Apple latent spherical virus as gene silencing vector in pea (Pisum sativum L.). , 2019, 1, e14.		3
17	Structural basis of potassium activation in plant asparaginases. FEBS Journal, 2018, 285, 1528-1539.	4.7	14
18	Slow darkening of pinto bean seed coat is associated with significant metabolite and transcript differences related to proanthocyanidin biosynthesis. BMC Genomics, 2018, 19, 260.	2.8	16

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19	Cytosolic acetyl-CoA promotes histone acetylation predominantly at H3K27 in Arabidopsis. Nature Plants, 2017, 3, 814-824.	9.3	85
20	Advances in Asparagine Metabolism. Progress in Botany Fortschritte Der Botanik, 2017, , 49-74.	0.3	5
21	Comparison of Gene Families: Seed Storage and Other Seed Proteins. Compendium of Plant Genomes, 2017, , 201-217.	0.5	9
22	Combining Isotope Labelling with High Resolution Liquid Chromatography-Tandem Mass Spectrometry to Study Sulfur Amino Acid Metabolism in Seeds of Common Bean (Phaseolus vulgaris). Proceedings of the International Plant Sulfur Workshop, 2017, , 135-144.	0.1	2
23	Prospects: The Importance of Common Bean as a Model Crop. Compendium of Plant Genomes, 2017, , 289-295.	0.5	1
24	Nitric Oxide and Reactive Oxygen Species Mediate Metabolic Changes in Barley Seed Embryo during Germination. Frontiers in Plant Science, 2016, 7, 138.	3.6	67
25	Genomic Analysis of Storage Protein Deficiency in Genetically Related Lines of Common Bean (Phaseolus vulgaris). Frontiers in Plant Science, 2016, 7, 389.	3.6	10
26	Higher endogenous methionine in transgenic Arabidopsis seeds affects the composition of storage proteins and lipids. Amino Acids, 2016, 48, 1413-1422.	2.7	19
27	Physicochemical characterization of a navy bean (Phaseolus vulgaris) protein fraction produced using a solvent-free method. Food Chemistry, 2016, 208, 35-41.	8.2	53
28	Characterization of aromatic aminotransferases from Ephedra sinica Stapf. Amino Acids, 2016, 48, 1209-1220.	2.7	16
29	Glyoxylate cycle and metabolism of organic acids in the scutellum of barley seeds during germination. Plant Science, 2016, 248, 37-44.	3.6	33
30	Soybean seeds overexpressing asparaginase exhibit reduced nitrogen concentration. Physiologia Plantarum, 2015, 155, 126-137.	5.2	7
31	Differential response to sulfur nutrition of two common bean genotypes differing in storage protein composition. Frontiers in Plant Science, 2015, 6, 92.	3.6	26
32	Transcriptome Profiling of Khat (Catha edulis) and Ephedra sinica Reveals Gene Candidates Potentially Involved in Amphetamine-Type Alkaloid Biosynthesis. PLoS ONE, 2015, 10, e0119701.	2.5	25
33	Determining Sulfur-Limiting Conditions for Studies of Seed Composition in Common Bean (Phaseolus) Tj ETQq1 1 0.784314 rgBT /Ove	0.1	1
34	Na⁺/K⁺exchange switches the catalytic apparatus of potassium-dependent plant<scp>L</scp>-asparaginase. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 1854-1872.	2.5	23
35	Genome-wide single nucleotide polymorphism and Insertion-Deletion discovery through next-generation sequencing of reduced representation libraries in common bean. Molecular Breeding, 2014, 33, 769-778.	2.1	29
36	Identification and characterization of omega-amidase as an enzyme metabolically linked to asparagine transamination in Arabidopsis. Phytochemistry, 2014, 99, 36-43.	2.9	28

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37	Genetic transformation and full recovery of alfalfa plants via secondary somatic embryogenesis. In Vitro Cellular and Developmental Biology - Plant, 2013, 49, 17-23.	2.1	16
38	Characterization of Arabidopsis serine:glyoxylate aminotransferase, AGT1, as an asparagine aminotransferase. Phytochemistry, 2013, 85, 30-35.	2.9	51
39	Transcriptome Profiling Identifies Candidate Genes Associated with the Accumulation of Distinct Sulfur Î³-Glutamyl Dipeptides in Phaseolus vulgaris and Vigna mungo Seeds. Frontiers in Plant Science, 2013, 4, 60.	3.6	21
40	Characterization of a Cruciferin Deficient Mutant of Arabidopsis and Its Utility for Overexpression of Foreign Proteins in Plants. PLoS ONE, 2013, 8, e64980.	2.5	20
41	Relationship between asparagine metabolism and protein concentration in soybean seed. Journal of Experimental Botany, 2012, 63, 3173-3184.	4.8	64
42	Transcripts of sulphur metabolic genes are co-ordinately regulated in developing seeds of common bean lacking phaseolin and major lectins. Journal of Experimental Botany, 2012, 63, 6283-6295.	4.8	25
43	Benzaldehyde is a precursor of phenylpropylamino alkaloids as revealed by targeted metabolic profiling and comparative biochemical analyses in Ephedra spp.. Phytochemistry, 2012, 81, 71-79.	2.9	20
44	Biosynthesis of amphetamine analogs in plants. Trends in Plant Science, 2012, 17, 404-412.	8.8	30
45	Transcriptomics of Legume Seed: Soybean a Model Grain Legume. , 2012, , 129-142.		2
46	Role of asparaginase variable loop at the carboxyl terminal of the alpha subunit in the determination of substrate preference in plants. Planta, 2012, 235, 1013-1022.	3.2	21
47	Arabidopsis mutants lacking asparaginases develop normally but exhibit enhanced root inhibition by exogenous asparagine. Amino Acids, 2012, 42, 2307-2318.	2.7	33
48	Expressed sequence tag analysis of khat (Catha edulis) provides a putative molecular biochemical basis for the biosynthesis of phenylpropylamino alkaloids. Genetics and Molecular Biology, 2011, 34, 640-646.	1.3	25
49	Analysis of common bean expressed sequence tags identifies sulfur metabolic pathways active in seed and sulfur-rich proteins highly expressed in the absence of phaseolin and major lectins. BMC Genomics, 2011, 12, 268.	2.8	33
50	Proteomic analysis of common bean seed with storage protein deficiency reveals up-regulation of sulfur-rich proteins and starch and raffinose metabolic enzymes, and down-regulation of the secretory pathway. Journal of Proteomics, 2010, 73, 1587-1600.	2.4	63
51	A single-repeat MYB transcription factor, GmMYB176, regulates CHS8 gene expression and affects isoflavonoid biosynthesis in soybean. Plant Journal, 2010, 62, no-no.	5.7	129
52	Functional Genomicsâ€"Transcriptomics in Soybean. , 2010, , 199-222.		0
53	Seed Storage Protein Deficiency Improves Sulfur Amino Acid Content in Common Bean (<i>Phaseolus) Tj ETQq1 1 0.784314 rgBT /Ov and Food Chemistry, 2008, 56, 5647-5654.	5.2	53
54	Sulfotransferases from Plants, Algae and Phototrophic Bacteria. Advances in Photosynthesis and Respiration, 2008, , 111-130.	1.0	12

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55	Molecular and biochemical characterization of two brassinosteroid sulfotransferases from Arabidopsis, AtST4a (At2g14920) and AtST1 (At2g03760). Planta, 2007, 225, 1233-1244.	3.2	85
56	Co-occurrence of both l-asparaginase subtypes in Arabidopsis: At3g16150 encodes a K+-dependent l-asparaginase. Planta, 2006, 224, 668-679.	3.2	74
57	Free amino acid profiles suggest a possible role for asparagine in the control of storage-product accumulation in developing seeds of low- and high-protein soybean lines. Journal of Experimental Botany, 2005, 56, 1951-1963.	4.8	83
58	Molecular and biochemical characterization of BNST4, an ethanol-inducible steroid sulfotransferase from Brassica napus, and regulation of BNST genes by chemical stress and during development. Plant Science, 2004, 166, 1359-1370.	3.6	30
59	Plant Soluble Sulfotransferases: Structural and Functional Similarity with Mammalian Enzymes. Recent Advances in Phytochemistry, 2000, 34, 433-456.	0.5	16
60	Inactivation of Brassinosteroid Biological Activity by a Salicylate-inducible Steroid Sulfotransferase from Brassica napus. Journal of Biological Chemistry, 1999, 274, 20925-20930.	3.4	114
61	3â€˜-Phosphoadenosine 5â€˜-Phosphosulfate Binding Site of Flavonol 3-Sulfotransferase Studied by Affinity Chromatography and31P NMRâ€. Biochemistry, 1999, 38, 4066-4071.	2.5	22
62	Recent developments in the study of the structure-function relationship of flavonol sulfotransferases. Chemico-Biological Interactions, 1998, 109, 117-122.	4.0	15
63	Biochemistry and molecular biology of plant sulfotransferases. FASEB Journal, 1997, 11, 517-525.	0.5	105
64	Mutational Analysis of Domain II of Flavonol 3-Sulfotransferase. FEBS Journal, 1997, 247, 1056-1062.	0.2	25
65	Chimeric Flavonol Sulfotransferases Define a Domain Responsible for Substrate and Position Specificities. Journal of Biological Chemistry, 1995, 270, 12498-12502.	3.4	44
66	Identification of Amino Acid Residues Critical for Catalysis and Cosubstrate Binding in the Flavonol 3-Sulfotransferase. Journal of Biological Chemistry, 1995, 270, 30458-30463.	3.4	67
67	AAC Argosy navy dry bean. Canadian Journal of Plant Science, 0, , .	0.9	0
68	AAC Shock navy dry bean. Canadian Journal of Plant Science, 0, , .	0.9	0
69	Development of germplasm lines of edible bean with improved cysteine and methionine concentration. , 0, , .		0
70	A fast and efficient method to introduce apple latent spherical virus to legume plants via <scp> Agrobacterium rhizogenes </scp> â€mediated transformation of hairy roots. , 0, , .		0