Diego F GÃ³mez-Casati

List of Publications by Year
in descending order

76 papers	1,857 citations	257450 24 h-index	289244 40 g-index
78 all docs	78 docs citations	78 times ranked	1858 citing authors

#	Article	IF	Citations
1	Gamma carbonic anhydrases in plant mitochondria. Plant Molecular Biology, 2004, 55, 193-207.	3.9	124
2	Characterization of Arabidopsis Lines Deficient in GAPC-1, a Cytosolic NAD-Dependent Glyceraldehyde-3-Phosphate Dehydrogenase. Plant Physiology, 2008, 148, 1655-1667.	4.8	115
3	Deficiency of Arabidopsis thaliana frataxin alters activity of mitochondrial Fe-S proteins and induces oxidative stress. Plant Journal, 2006, 48, 873-882.	5.7	97
4	ADP-glucose pyrophosphorylase from wheat endosperm. Purification and characterization of an enzyme with novel regulatory properties. Planta, 2002, 214, 428-434.	3.2	91
5	Characterization of an Arabidopsis thaliana mutant lacking a cytosolic non-phosphorylating glyceraldehyde-3-phosphate dehydrogenase. Plant Molecular Biology, 2006, 61, 945-957.	3.9	82
6	Metabolomics in Plants and Humans: Applications in the Prevention and Diagnosis of Diseases. BioMed Research International, 2013, 2013, 1-11.	1.9	76
7	Starch metabolism in green algae. Starch/Staerke, 2014, 66, 28-40.	2.1	73
8	Nitric oxide accumulation is required to protect against ironâ€mediated oxidative stress in frataxinâ€deficient Arabidopsis plants. FEBS Letters, 2009, 583, 542-548.	2.8	72
9	Gamma carbonic anhydrase like complex interact with plant mitochondrial complex I. Plant Molecular Biology, 2004, 56, 947-957.	3.9	66
10	Role of the N-Terminal Starch-Binding Domains in the Kinetic Properties of Starch Synthase III from <i>Arabidopsis thaliana</i>. Biochemistry, 2008, 47, 3026-3032.	2.5	66
11	Functional and molecular characterization of the frataxin homolog fromArabidopsis thaliana,. FEBS Letters, 2004, 576, 141-144.	2.8	56
12	Effect of Mitochondrial Dysfunction on Carbon Metabolism and Gene Expression in Flower Tissues of Arabidopsis thaliana. Molecular Plant, 2011, 4, 127-143.	8.3	48
13	Functional and structural characterization of the catalytic domain of the starch synthase III from <i>Arabidopsis thaliana</i>. Proteins: Structure, Function and Bioinformatics, 2008, 70, 31-40.	2.6	42
14	The starchâ€binding capacity of the noncatalytic SBD2 region and the interaction between the Nâ€and Câ€terminal domains are involved in the modulation of the activity of starch synthaseâ€ƒIII from <i>Arabidopsisâ€ƒthaliana</i>. FEBS Journal, 2010, 277, 428-440.	4.7	42
15	Identification of Functionally Important Amino-Terminal Arginines ofAgrobacterium tumefaciensADP-Glucose Pyrophosphorylase by Alanine Scanning Mutagenesisâ€. Biochemistry, 2001, 40, 10169-10178.	2.5	41
16	A mitochondrial dysfunction induces the expression of nuclear-encoded complex I genes in engineered male sterile Arabidopsis thaliana. FEBS Letters, 2002, 532, 70-74.	2.8	38
17	The mitochondrial protein frataxin is essential for heme biosynthesis in plants. FEBS Journal, 2011, 278, 470-481.	4.7	37
18	Exploring frataxin function. IUBMB Life, 2012, 64, 56-63.	3.4	37

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19	Structural and Functional Studies of the Mitochondrial Cysteine Desulfurase from Arabidopsis thaliana. Molecular Plant, 2012, 5, 1001-1010.	8.3	36
20	Frataxin Is Localized to Both the Chloroplast and Mitochondrion and Is Involved in Chloroplast Fe-S Protein Function in Arabidopsis. PLoS ONE, 2015, 10, e0141443.	2.5	36
21	Ultrasensitive behavior in the synthesis of storage polysaccharides in cyanobacteria. Planta, 2003, 216, 969-975.	3.2	35
22	Starch-synthase III family encodes a tandem of three starch-binding domains. Proteins: Structure, Function and Bioinformatics, 2006, 65, 27-31.	2.6	35
23	Structural and kinetic characterization of NADP-dependent, non-phosphorylating glyceraldehyde-3-phosphate dehydrogenase from celery leaves. Plant Science, 2000, 154, 107-115.	3.6	29
24	The E3 ubiquitin-ligase SEVEN IN ABSENTIA like 7 mono-ubiquitinates glyceraldehyde-3-phosphate dehydrogenase 1 isoform in vitro and is required for its nuclear localization in Arabidopsis thaliana. International Journal of Biochemistry and Cell Biology, 2016, 70, 48-56.	2.8	27
25	The ADP-glucose pyrophosphorylase fromEscherichia colicomprises two tightly bound distinct domains. FEBS Letters, 2004, 573, 99-104.	2.8	25
26	The PAP/SAL1 retrograde signaling pathway is involved in iron homeostasis. Plant Molecular Biology, 2020, 102, 323-337.	3.9	22
27	The mitochondrial proteins AtHscB and AtIsu1 involved in Feâ€"S cluster assembly interact with the Hsp70-type chaperon AtHscA2 and modulate its catalytic activity. Mitochondrion, 2014, 19, 375-381.	3.4	21
28	Expression and one-step purification of recombinant Arabidopsis thaliana frataxin homolog (AtFH). Protein Expression and Purification, 2007, 51, 157-161.	1.3	20
29	An enzyme-coupled continuous spectrophotometric assay for glycogen synthases. Molecular Biology Reports, 2012, 39, 585-591.	2.3	18
30	ULTRASENSITIVITY IN (SUPRA)MOLECULARLY ORGANIZED AND CROWDED ENVIRONMENTS. Cell Biology International, 2001, 25, 1091-1099.	3.0	17
31	Ferrochelatase activity of plant frataxin. Biochimie, 2019, 156, 118-122.	2.6	17
32	Polysaccharide-synthesizing Glycosyltransferases and Carbohydrate Binding Modules: the case of Starch Synthase III. Protein and Peptide Letters, 2013, 20, 856-863.	0.9	17
33	Characterization of a novel Kazal-type serine proteinase inhibitor of Arabidopsis thaliana. Biochimie, 2016, 123, 85-94.	2.6	16
34	Functional demonstrations of starch binding domains present in Ostreococcus tauri starch synthases isoforms. BMC Research Notes, 2015, 8, 613.	1.4	15
35	Preferential binding of SBD from <i>Arabidopsis thaliana</i> SSIII to polysaccharides: Study of amino acid residues involved. Starch/Staerke, 2011, 63, 451-460.	2.1	14
36	Altered levels of AtHSCB disrupts iron translocation from roots to shoots. Plant Molecular Biology, 2016, 92, 613-628.	3.9	14

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37	Plant Frataxin in Metal Metabolism. Frontiers in Plant Science, 2018, 9, 1706.	3.6	13
38	Measurement of the glycogen synthetic pathway in permeabilized cells of cyanobacteria. FEMS Microbiology Letters, 2001, 194, 7-11.	1.8	12
39	The targeting of starch binding domains from starch synthase III to the cell wall alters cell wall composition and properties. Plant Molecular Biology, 2017, 93, 121-135.	3.9	12
40	Characterization of the Arabidopsis thaliana E3 Ubiquitin-Ligase AtSINAL7 and Identification of the Ubiquitination Sites. PLoS ONE, 2013, 8, e73104.	2.5	11
41	Identification and characterization of a novel starch branching enzyme from the picoalgae Ostreococcus tauri. Archives of Biochemistry and Biophysics, 2017, 618, 52-61.	3.0	11
42	Identification of two frataxin isoforms in Zea mays : Structural and functional studies. Biochimie, 2017, 140, 34-47.	2.6	11
43	Altered levels of mitochondrial NFS1 affect cellular Fe and S contents in plants. Plant Cell Reports, 2019, 38, 981-990.	5.6	11
44	Nuclear-encoded mitochondrial complex I gene expression is restored toÂnormal levels byÂinhibition ofÂunedited ATP9 transgene expression inÂArabidopsisÂthaliana. Plant Physiology and Biochemistry, 2006, 44, 1-6.	5.8	10
45	Identification of a novel starch synthase III from the picoalgae Ostreococcus tauri. Biochimie, 2017, 133, 37-44.	2.6	10
46	Starch Synthesis in Ostreococcus tauri: The Starch-Binding Domains of Starch Synthase III-B Are Essential for Catalytic Activity. Frontiers in Plant Science, 2018, 9, 1541.	3.6	9
47	Over-expression of SINAL7 increases biomass and drought tolerance, and also delays senescence in Arabidopsis. Journal of Biotechnology, 2018, 283, 11-21.	3.8	9
48	Studies on the Effect of Temperature on the Activity and Stability of Cyanobacterial ADP-Glucose Pyrophosphorylase. Archives of Biochemistry and Biophysics, 2000, 384, 319-326.	3.0	8
49	Copper redox chemistry of plant frataxins. Journal of Inorganic Biochemistry, 2018, 180, 135-140.	3.5	8
50	Iron-Sulfur Cluster Complex Assembly in the Mitochondria of Arabidopsis thaliana. Plants, 2020, 9, 1171.	3.5	8
51	Heterologous expression of non-phosphorylating glyceraldehyde-3-phosphate dehydrogenase from Triticum aestivum and Arabidopsis thaliana. Biochimie, 2010, 92, 909-913.	2.6	7
52	Research on Plants for the Understanding of Diseases of Nuclear and Mitochondrial Origin. Journal of Biomedicine and Biotechnology, 2012, 2012, 1-12.	3.0	7
53	Improving the glycosyltransferase activity of Agrobacterium tumefaciens glycogen synthase by fusion of N-terminal starch binding domains (SBDs). Biochimie, 2013, 95, 1865-1870.	2.6	7
54	Omics Approaches for the Engineering of Pathogen Resistant Plants. Current Issues in Molecular Biology, 2016, 19, 89-98.	2.4	7

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55	A simple laboratory experiment for the teaching of the assay and kinetic characterization of enzymes. Biochemical Education, 1997, 25, 106-109.	0.1	6
56	Mitochondrial dysfunction affects chloroplast functions. Plant Signaling and Behavior, 2011, 6, 1904-1907.	2.4	6
57	Characterization of SdGA, a cold-adapted glucoamylase from Saccharophagus degradans. Biotechnology Reports (Amsterdam, Netherlands), 2021, 30, e00625.	4.4	6
58	CBM20CP, a novel functional protein of starch metabolism in green algae. Plant Molecular Biology, 2022, 108, 363-378.	3.9	6
59	Applications of Bioinformatics to Plant Biotechnology. Current Issues in Molecular Biology, 2018, 27, 89-104.	2.4	6
60	On the interaction of substrate analogues with non-phosphorylating glyceraldehyde-3-phosphate dehydrogenase from celery leaves. Plant Science, 2002, 162, 689-696.	3.6	5
61	Identification and analysis of OsttaDSP, a phosphoglucan phosphatase from Ostreococcus tauri. PLoS ONE, 2018, 13, e0191621.	2.5	5
62	PAP/SAL1 retrograde signaling pathway modulates iron deficiency response in alkaline soils. Plant Science, 2021, 304, 110808.	3.6	5
63	Fe-S Protein Synthesis in Green Algae Mitochondria. Plants, 2021, 10, 200.	3.5	4
64	Starch Metabolism in Green Plants. , 2015, , 329-376.		4
65	The Significance of Metabolomics in Human Health. , 2016, , 89-100.		3
66	Editorial: Metallic Micronutrient Homeostasis in Plants. Frontiers in Plant Science, 2019, 10, 927.	3.6	3
67	Study of Oxidative Stress and Genotoxicity by Arsenic Contamination in Glycine max. L. International Journal of Plant & Soil Science, 2015, 8, 1-15.	0.2	3
68	A simple method for the addition of rotenone in <i>Arabidopsis thaliana</i> leaves. Plant Signaling and Behavior, 2015, 10, e1073871.	2.4	2
69	Development of fast and simple chromogenic methods for glucan phosphatases in-gel activity assays. Analytical Biochemistry, 2017, 517, 36-39.	2.4	2
70	Identification and characterization of ChlreSEX4, a novel glucan phosphatase from Chlamydomonas reinhardtii green alga. Archives of Biochemistry and Biophysics, 2020, 680, 108235.	3.0	1
71	Starch Metabolism in Green Plants. , 2014, , 1-42.		1
72	Contribution of Yeast and Plant Research for Improving Human Health. Journal of Biomedicine and Biotechnology, 2012, 2012, 1-2.	3.0	0

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73	Molecular basis of clinical metabolomics. , 2020, , 47-55.		0
74	Interaction Between Plant Secondary Metabolites and the Human Metabolome. , 2021, , 526-531.		0
75	Drugs for the Treatment of Mitochondrial Diseases. Current Chemical Biology, 2019, 13, 19-24.	0.5	0
76	Functional and Structural Characterization of a Novel Isoamylase from Ostreococcus tauri and Role of the N-Terminal Domain. Open Biotechnology Journal, 2020, 14, 1-11.	1.2	0