Francisco J Cejudo

List of Publications by Citations

105 papers	4,140 citations	38 h-index	61 g-index
109 ext. papers	4,609 ext. citations	5.6 avg, IF	5.52 L-index

#	Paper	IF	Citations
105	A novel NADPH thioredoxin reductase, localized in the chloroplast, which deficiency causes hypersensitivity to abiotic stress in Arabidopsis thaliana. *Journal of Biological Chemistry*, **2004**, 279, 43821-7	5.4	268
104	Rice NTRC is a high-efficiency redox system for chloroplast protection against oxidative damage. *Plant Cell*, **2006**, 18, 2356-68	11.6	253
103	NTRC links built-in thioredoxin to light and sucrose in regulating starch synthesis in chloroplasts and amyloplasts. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 9908-13	11.5	189
102	Functional analysis of the pathways for 2-Cys peroxiredoxin reduction in Arabidopsis thaliana chloroplasts. *Journal of Experimental Botany*, **2010**, 61, 4043-54	7	151
101	A role for the DOF transcription factor BPBF in the regulation of gibberellin-responsive genes in barley aleurone. *Plant Physiology*, **2002**, 130, 111-9	6.6	135
100	Identification and expression analysis of a gene encoding a bacterial-type phosphoenolpyruvate carboxylase from Arabidopsis and rice. *Plant Physiology*, **2003**, 132, 949-57	6.6	107
99	Type-h thioredoxins accumulate in the nucleus of developing wheat seed tissues suffering oxidative stress. *Planta*, **2003**, 217, 392-9	4.7	93
98	The nucellus degenerates by a process of programmed cell death during the early stages of wheat grain development. *Planta*, **2001**, 213, 352-60	4.7	93
97	An antioxidant redox system in the nucleus of wheat seed cells suffering oxidative stress. *Plant Journal*, **2009**, 57, 132-45	6.9	92
96	Programmed cell death (PCD): an essential process of cereal seed development and germination. *Frontiers in Plant Science*, **2014**, 5, 366	6.2	87
95	Expression and localization of phosphoenolpyruvate carboxylase in developing and germinating wheat grains. *Plant Physiology*, **1998**, 116, 1249-58	6.6	76
94	NADPH thioredoxin reductase C is localized in plastids of photosynthetic and nonphotosynthetic tissues and is involved in lateral root formation in Arabidopsis. *Plant Cell*, **2012**, 24, 1534-48	11.6	74
93	Arabidopsis phosphoenolpyruvate carboxylase genes encode immunologically unrelated polypeptides and are differentially expressed in response to drought and salt stress. *Planta*, **2006**, 223, 901-9	4.7	73
92	NTRC-dependent redox balance of 2-Cys peroxiredoxins is needed for optimal function of the photosynthetic apparatus. *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 12069-12074	11.5	72
91	NADPH Thioredoxin reductase C controls the redox status of chloroplast 2-Cys peroxiredoxins in Arabidopsis thaliana. *Molecular Plant*, **2009**, 2, 298-307	14.4	71
90	Salt-specific regulation of the cytosolic O-acetylserine(thiol)lyase gene from Arabidopsis thaliana is dependent on abscisic acid. *Plant Molecular Biology*, **1999**, 40, 729-36	4.6	71
89	Overoxidation of 2-Cys peroxiredoxin in prokaryotes: cyanobacterial 2-Cys peroxiredoxins sensitive to oxidative stress. *Journal of Biological Chemistry*, **2010**, 285, 34485-92	5.4	65

88	Thioredoxin f1 and NADPH-Dependent Thioredoxin Reductase C Have Overlapping Functions in Regulating Photosynthetic Metabolism and Plant Growth in Response to Varying Light Conditions. *Plant Physiology*, **2015**, 169, 1766-86	6.6	64
87	The chloroplast NADPH thioredoxin reductase C, NTRC, controls non-photochemical quenching of light energy and photosynthetic electron transport in Arabidopsis. *Plant, Cell and Environment*, **2016**, 39, 804-22	8.4	64
86	A gibberellin-induced nuclease is localized in the nucleus of wheat aleurone cells undergoing programmed cell death. *Journal of Biological Chemistry*, **2004**, 279, 11530-6	5.4	62
85	Abiotic stresses affecting water balance induce phosphoenolpyruvate carboxylase expression in roots of wheat seedlings. *Planta*, **2003**, 216, 985-92	4.7	62
84	Characterization of two thioredoxins h with predominant localization in the nucleus of aleurone and scutellum cells of germinating wheat seeds. *Plant Molecular Biology*, **2001**, 46, 361-71	4.6	61
83	NTRC new ways of using NADPH in the chloroplast. *Physiologia Plantarum*, **2008**, 133, 516-24	4.6	58
82	A proposed reaction mechanism for rice NADPH thioredoxin reductase C, an enzyme with protein disulfide reductase activity. *FEBS Letters*, **2009**, 583, 1399-402	3.8	53
81	Type-f thioredoxins have a role in the short-term activation of carbon metabolism and their loss affects growth under short-day conditions in Arabidopsis thaliana. *Journal of Experimental Botany*, **2016**, 67, 1951-64	7	53
80	Identification of a nuclear-localized nuclease from wheat cells undergoing programmed cell death that is able to trigger DNA fragmentation and apoptotic morphology on nuclei from human cells. *Biochemical Journal*, **2006**, 397, 529-36	3.8	51
79	NADPH thioredoxin reductase C is involved in redox regulation of the Mg-chelatase I subunit in Arabidopsis thaliana chloroplasts. *Molecular Plant*, **2014**, 7, 1252-5	14.4	49
78	Characterization of the expression of a wheat cystatin gene during caryopsis development. *Plant Molecular Biology*, **2002**, 50, 687-98	4.6	49
77	Cloning of thioredoxin h reductase and characterization of the thioredoxin reductase-thioredoxin h system from wheat. *Biochemical Journal*, **2002**, 367, 491-7	3.8	49
76	The function of the NADPH thioredoxin reductase C-2-Cys peroxiredoxin system in plastid redox regulation and signalling. *FEBS Letters*, **2012**, 586, 2974-80	3.8	48
75	Characterization of the Endoproteases Appearing during Wheat Grain Development. *Plant Physiology*, **1996**, 112, 1211-1217	6.6	47
74	In Vivo and in Vitro Phosphorylation of the Phosphoenolpyruvate Carboxylase from Wheat Seeds during Germination. *Plant Physiology*, **1996**, 111, 551-558	6.6	46
73	A gibberellin-regulated gene from wheat with sequence homology to cathepsin B of mammalian cells. *Plant Journal*, **1992**, 2, 937-948	6.9	45
72	NADPH Thioredoxin Reductase C and Thioredoxins Act Concertedly in Seedling Development. *Plant Physiology*, **2017**, 174, 1436-1448	6.6	42
71	A germination-related gene encoding a serine carboxypeptidase is expressed during the differentiation of the vascular tissue in wheat grains and seedlings. *Planta*, **2002**, 215, 727-34	4.7	41

70	2-Cys Peroxiredoxins Participate in the Oxidation of Chloroplast Enzymes in the Dark. *Molecular Plant*, **2018**, 11, 1377-1388	14.4	41
69	Patterns of starchy endosperm acidification and protease gene expression in wheat grains following germination. *Plant Physiology*, **1999**, 119, 81-8	6.6	39
68	Import and processing of the precursor of the Rieske FeS protein of tobacco chloroplasts. *Plant Molecular Biology*, **1992**, 20, 289-99	4.6	38
67	Germination-related genes encoding proteolytic enzymes are expressed in the nucellus of developing wheat grains. *Plant Journal*, **1998**, 15, 569-574	6.9	36
66	Cloning and characterization of three thioredoxin h isoforms from wheat showing differential expression in seeds. *Journal of Experimental Botany*, **2006**, 57, 2165-72	7	36
65	Circadian and developmental regulation of vacuolar invertase expression in petioles of sugar beet plants. *Planta*, **2005**, 222, 386-95	4.7	35
64	Tissue-specific expression of ATCYS-3A, a gene encoding the cytosolic isoform of O-acetylserine(thiol)lyase in Arabidopsis. *Plant Journal*, **1997**, 11, 347-52	6.9	34
63	PsTRXh1 and PsTRXh2 are both pea h-type thioredoxins with antagonistic behavior in redox imbalances. *Plant Physiology*, **2007**, 143, 300-11	6.6	34
62	Pattern of endoproteolysis following wheat grain germination. *Physiologia Plantarum*, **1995**, 95, 253-259	4.6	34
61	Short-term ammonium inhibition of nitrogen fixation in Azotobacter. *Biochemical and Biophysical Research Communications*, **1984**, 123, 431-7	3.4	34
60	Nitric oxide is required for the auxin-induced activation of NADPH-dependent thioredoxin reductase and protein denitrosylation during root growth responses in arabidopsis. *Annals of Botany*, **2015**, 116, 695-702	4.1	32
59	Short-term nitrate (nitrite) inhibition of nitrogen fixation in Azotobacter chroococcum. *Journal of Bacteriology*, **1986**, 165, 240-3	3.5	32
58	A comparison between nuclear dismantling during plant and animal programmed cell death. *Plant Science*, **2012**, 197, 114-21	5.3	31
57	Peroxiredoxins and NADPH-dependent thioredoxin systems in the model legume Lotus japonicus. *Plant Physiology*, **2011**, 156, 1535-47	6.6	31
56	Analysis of the gibberellin-responsive promoter of a cathepsin B-like gene from wheat. *Plant Molecular Biology*, **1992**, 20, 849-56	4.6	31
55	Chloroplast Redox Regulatory Mechanisms in Plant Adaptation to Light and Darkness. *Frontiers in Plant Science*, **2019**, 10, 380	6.2	30
54	The contribution of NADPH thioredoxin reductase C (NTRC) and sulfiredoxin to 2-Cys peroxiredoxin overoxidation in Arabidopsis thaliana chloroplasts. *Journal of Experimental Botany*, **2015**, 66, 2957-66	7	29
53	Electron transfer pathways and dynamics of chloroplast NADPH-dependent thioredoxin reductase C (NTRC). *Journal of Biological Chemistry*, **2012**, 287, 33865-72	5.4	28

52	Evidence for a slow-turnover form of the Ca2+-independent phosphoenolpyruvate carboxylase kinase in the aleurone-endosperm tissue of germinating barley seeds. *Plant Physiology*, **1999**, 119, 511-20	6.6	28
51	Isolation and analysis of the soybean SGA2 gene (cDNA), encoding a new member of the plant G-protein family of signal transducers. *Plant Molecular Biology*, **1996**, 32, 1227-34	4.6	28
50	Nucleotide sequence of wild-type and mutant nifR4 (ntrA) genes of Rhodobacter capsulatus: identification of an essential glycine residue. *Nucleic Acids Research*, **1989**, 17, 5377	20.1	28
49	A comparative analysis of the NADPH thioredoxin reductase C-2-Cys peroxiredoxin system from plants and cyanobacteria. *Plant Physiology*, **2011**, 155, 1806-16	6.6	27
48	Immunocytochemical localization of Pisum sativum TRXs f and m in non-photosynthetic tissues. *Journal of Experimental Botany*, **2008**, 59, 1267-77	7	26
47	Ammonia assimilation pathways in Rhodopseudomonas capsulata E1F1. *Archives of Microbiology*, **1983**, 136, 147-151	3	26
46	Molecular and regulatory properties of glutamine synthetase from the phototrophic bacterium Rhodopseudomonas capsulata E1F1. *Journal of Bacteriology*, **1985**, 162, 804-9	3.5	26
45	The scutellum of germinated wheat grains undergoes programmed cell death: identification of an acidic nuclease involved in nucleus dismantling. *Journal of Experimental Botany*, **2012**, 63, 5475-85	7	25
44	Molecular recognition in the interaction of chloroplast 2-Cys peroxiredoxin with NADPH-thioredoxin reductase C (NTRC) and thioredoxin x. *FEBS Letters*, **2014**, 588, 4342-7	3.8	24
43	An intermolecular disulfide-based light switch for chloroplast psbD gene expression in Chlamydomonas reinhardtii. *Plant Journal*, **2012**, 72, 378-89	6.9	23
42	Thiol-based redox homeostasis and signaling. *Frontiers in Plant Science*, **2014**, 5, 266	6.2	21
41	Overoxidation of chloroplast 2-Cys peroxiredoxins: balancing toxic and signaling activities of hydrogen peroxide. *Frontiers in Plant Science*, **2013**, 4, 310	6.2	20
40	The quaternary structure of NADPH thioredoxin reductase C is redox-sensitive. *Molecular Plant*, **2009**, 2, 457-67	14.4	20
39	Isolation and characterisation of a wheat phosphoenolpyruvate carboxylase gene. Modelling of the encoded protein. *Plant Science*, **2002**, 162, 233-238	5.3	20
38	Plant responses to fungal volatiles involve global posttranslational thiol redox proteome changes that affect photosynthesis. *Plant, Cell and Environment*, **2019**, 42, 2627-2644	8.4	18
37	Gibberellin-regulated expression of neutral and vacuolar invertase genes in petioles of sugar beet plants. *Plant Science*, **2007**, 172, 839-846	5.3	17
36	Insights into the function of NADPH thioredoxin reductase C (NTRC) based on identification of NTRC-interacting proteins in vivo. *Journal of Experimental Botany*, **2019**, 70, 5787-5798	7	15
35	A hydrogen peroxide detoxification system in the nucleus of wheat seed cells: protection or signaling role?. *Plant Signaling and Behavior*, **2009**, 4, 23-5	2.5	15

34	Amyl expression during wheat seed germination. *Plant Science*, **1995**, 106, 207-213	5.3	15
33	An event of alternative splicing affects the expression of the NTRC gene, encoding NADPH-thioredoxin reductase C, in seed plants. *Plant Science*, **2017**, 258, 21-28	5.3	13
32	The NADPH-Dependent Thioredoxin Reductase C-2-Cys Peroxiredoxin Redox System Modulates the Activity of Thioredoxin x in Arabidopsis Chloroplasts. *Plant and Cell Physiology*, **2018**, 59, 2155-2164	4.9	13
31	Molecular cloning and biochemical characterization of three phosphoglycerate kinase isoforms from developing sunflower (Helianthus annuus L.) seeds. *Phytochemistry*, **2012**, 79, 27-38	4	13
30	Purification and properties of an extracellular invertase from Azotobacter chroococcum. *Enzyme and Microbial Technology*, **1991**, 13, 267-271	3.8	13
29	Redox-control of chlorophyll biosynthesis mainly depends on thioredoxins. *FEBS Letters*, **2018**, 592, 3111-3115	3.3	11
28	Chloroplast redox homeostasis is essential for lateral root formation in Arabidopsis. *Plant Signaling and Behavior*, **2012**, 7, 1177-9	2.5	11
27	Short-term ammonium inhibition of nitrate uptake by Azotobacter chroococcum. *Archives of Microbiology*, **1986**, 144, 187-190	3	11
26	Production of exocellular polysaccharide by Azotobacter chroococcum. *Applied Biochemistry and Biotechnology*, **1991**, 30, 273-84	3.2	10
25	NTRC Plays a Crucial Role in Starch Metabolism, Redox Balance, and Tomato Fruit Growth. *Plant Physiology*, **2019**, 181, 976-992	6.6	10
24	Redox regulation of chloroplast metabolism. *Plant Physiology*, **2021**, 186, 9-21	6.6	9
23	Posttranslational regulation of nitrogenase activity by fixed nitrogen in Azotobacter chroococcum. *Biochimica Et Biophysica Acta - General Subjects*, **1996**, 1291, 67-74	4	8
22	The Azotobacter chroococcum nitrate permease is a multicomponent system. *Biochimica Et Biophysica Acta - Bioenergetics*, **1993**, 1141, 75-80	4.6	8
21	Cloning, biochemical characterisation, tissue localisation and possible post-translational regulatory mechanism of the cytosolic phosphoglucose isomerase from developing sunflower seeds. *Planta*, **2010**, 232, 845-59	4.7	7
20	Effect of nitrogen starvation on ammonium-inhibition of nitrogenase activity in Azotobacter chroococcum. *Archives of Microbiology*, **1988**, 149, 481-484	3	7
19	Chloroplast dismantling in leaf senescence. *Journal of Experimental Botany*, **2021**, 72, 5905-5918	7	6
18	Cyanate is transported by the nitrate permease inAzotobacter chroococcum. *FEMS Microbiology Letters*, **1996**, 137, 91-94	2.9	5
17	Comparative analysis of cyanobacterial and plant peroxiredoxins and their electron donors: peroxidase activity and susceptibility to overoxidation. *Methods in Enzymology*, **2013**, 527, 257-73	1.7	4

16	Isolation and characterization of an Azotobacter chroococcum mutant deficient in nitrate transport. *FEMS Microbiology Letters*, **1990**, 67, 211-214	2.9	4
15	Photosynthetic activity of cotyledons is critical during post-germinative growth and seedling establishment. *Plant Signaling and Behavior*, **2017**, 12, e1347244	2.5	3
14	Chapter 14 Oxidative Stress and Thiol-Based Antioxidants in Cereal Seeds. *Advances in Botanical Research*, **2009**, 52, 437-460	2.2	3
13	Role of Mn(II) as regulator of nitrate assimilation in Azotobacter chroococcum. *Biochimica Et Biophysica Acta - General Subjects*, **1989**, 993, 36-41	4	3
12	Characterization of CYCLOPHILLIN38 shows that a photosynthesis-derived systemic signal controls lateral root emergence. *Plant Physiology*, **2021**, 185, 503-518	6.6	3
11	Exploring the Functional Relationship between -Type Thioredoxins and 2-Cys Peroxiredoxins in Chloroplasts. *Antioxidants*, **2020**, 9,	7.1	2
10	A sensor protein involved in induction of nitrate assimilation in Azotobacter chroococcum. *FEBS Letters*, **1996**, 393, 7-12	3.8	2
9	Regulation of Azotobacter chroococcum invertase. *Archives of Microbiology*, **1991**, 155, 309-311	3	2
8	Effect of divalent cations on the short-term NH +4 inhibition of nitrogen fixation in Azotobacter chroococcum. *Archives of Microbiology*, **1990**, 154, 313-316	3	2
7	Current Knowledge on Mechanisms Preventing Photosynthesis Redox Imbalance in Plants. *Antioxidants*, **2021**, 10,	7.1	2
6	A chloroplast redox relay adapts plastid metabolism to light and affects cytosolic protein quality control. *Plant Physiology*, **2021**, 187, 88-102	6.6	2
5	Chloroplast Lipids Metabolism and Function. A Redox Perspective. *Frontiers in Plant Science*, **2021**, 12, 712022	6.2	2
4	Nuclear Dismantling Events: Crucial Steps During the Execution of Plant Programmed Cell Death **2015**, 163-189		1
3	Markers of Developmentally Regulated Programmed Cell Death and Their Analysis in Cereal Seeds. *Methods in Molecular Biology*, **2018**, 1743, 21-37	1.4	1
2	On the Elaborate Network of Thioredoxins in Higher Plants. *Progress in Botany Fortschritte Der Botanik*, **2018**, 223-251	0.6	0
1	Gibberellin regulation of aleurone cell death in germinating wheat seeds. **2003**, 251-257		