Francesca Sparla

List of Publications by Year
in descending order

44 papers	2,457 citations	201575 27 h-index	243529 44 g-index
47 all docs	47 docs citations	47 times ranked	2693 citing authors

#	Article	IF	Citations
1	Crystal structure of chloroplastic thioredoxin z defines a typeâ€specific target recognition. Plant Journal, 2021, 107, 434-447.	2.8	8
2	Calvinâ€“Benson cycle regulation is getting complex. Trends in Plant Science, 2021, 26, 898-912.	4.3	57
3	The skeleton of Balanophyllia coral species suggests adaptive traits linked to the onset of mixotrophy. Science of the Total Environment, 2021, 795, 148778.	3.9	1
4	Influence of proteins on mechanical properties of a natural chitin-protein composite. Acta Biomaterialia, 2021, 120, 81-90.	4.1	13
5	A Plant Bioreactor for the Synthesis of Carbon Nanotube Bionic Nanocomposites. Frontiers in Bioengineering and Biotechnology, 2020, 8, 560349.	2.0	10
6	Impact of Drought on Soluble Sugars and Free Proline Content in Selected Arabidopsis Mutants. Biology, 2020, 9, 367.	1.3	57
7	The Thioredoxin-Regulated Î±-Amylase 3 of Arabidopsis thaliana Is a Target of S-Glutathionylation. Frontiers in Plant Science, 2019, 10, 993.	1.7	17
8	Arabidopsis and Chlamydomonas phosphoribulokinase crystal structures complete the redox structural proteome of the Calvinâ€“Benson cycle. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8048-8053.	3.3	25
9	Structural and Biochemical Insights into the Reactivity of Thioredoxin h1 from Chlamydomonas reinhardtii. Antioxidants, 2019, 8, 10.	2.2	24
10	Redox Homeostasis in Photosynthetic Organisms: Novel and Established Thiol-Based Molecular Mechanisms. Antioxidants and Redox Signaling, 2019, 31, 155-210.	2.5	95
11	Combining mutations at genes encoding key enzymes involved in starch synthesis affects the amylose content, carbohydrate allocation and hardness in the wheat grain. Plant Biotechnology Journal, 2018, 16, 1723-1734.	4.1	57
12	Redox Regulation of Starch Metabolism. Frontiers in Plant Science, 2018, 9, 1344.	1.7	52
13	The analysis of the different functions of starchâ€phosphorylating enzymes during the development of Arabidopsis thaliana plants discloses an unexpected role for the cytosolic isoform <scp>GWD2</scp>. Physiologia Plantarum, 2017, 160, 447-457.	2.6	10
14	Role of the NAD(P)H quinone oxidoreductase NQR and the cytochrome b AIR12 in controlling superoxide generation at the plasma membrane. Planta, 2017, 245, 807-817.	1.6	17
15	Electron current recordings in living cells. Biophysical Chemistry, 2017, 229, 57-61.	1.5	3
16	Photosynthetic properties of spring geophytes assessed by chlorophyll fluorescence analysis. Plant Physiology and Biochemistry, 2017, 118, 510-518.	2.8	9
17	The down-regulation of the genes encoding Isoamylase 1 alters the starch composition of the durum wheat grain. Plant Science, 2016, 252, 230-238.	1.7	14
18	Î²-amylase 1 (BAM1) degrades transitory starch to sustain proline biosynthesis during drought stress. Journal of Experimental Botany, 2016, 67, 1819-1826.	2.4	156

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19	Tuning Cysteine Reactivity and Sulfenic Acid Stability by Protein Microenvironment in Glyceraldehyde-3-Phosphate Dehydrogenases ofArabidopsis thaliana. Antioxidants and Redox Signaling, 2016, 24, 502-517.	2.5	31
20	AIR12, a b -type cytochrome of the plasma membrane of Arabidopsis thaliana is a negative regulator of resistance against Botrytis cinerea. Plant Science, 2015, 233, 32-43.	1.7	10
21	New insights into redox control of starch degradation. Current Opinion in Plant Biology, 2015, 25, 1-9.	3.5	47
22	Direct Recording of Trans-Plasma Membrane Electron Currents Mediated by a Member of the Cytochrome b561 Family of Soybean. Plant Physiology, 2015, 169, 986-995.	2.3	21
23	Unravelling the shape and structural assembly of the photosynthetic GAPDHâ€“CP12â€“PRK complex fromArabidopsis thalianaby small-angle X-ray scattering analysis. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 2372-2385.	2.5	13
24	How Are Cytochrome b561 Electron Currents Controlled by Membrane Voltage and Substrate Availability?. Antioxidants and Redox Signaling, 2014, 21, 384-391.	2.5	15
25	CP12-mediated protection of Calvinâ€“Benson cycle enzymes from oxidative stress. Biochimie, 2014, 97, 228-237.	1.3	55
26	Biomineralization in Mediterranean Corals: The Role of the Intraskeletal Organic Matrix. Crystal Growth and Design, 2014, 14, 4310-4320.	1.4	30
27	New Starch Phenotypes Produced by TILLING in Barley. PLoS ONE, 2014, 9, e107779.	1.1	59
28	Arabidopsis thaliana AMY3 Is a Unique Redox-regulated Chloroplastic Î±-Amylase. Journal of Biological Chemistry, 2013, 288, 33620-33633.	1.6	79
29	Redox regulation of the Calvinâ€“Benson cycle: something old, something new. Frontiers in Plant Science, 2013, 4, 470.	1.7	355
30	Conformational Selection and Folding-upon-binding of Intrinsically Disordered Protein CP12 Regulate Photosynthetic Enzymes Assembly. Journal of Biological Chemistry, 2012, 287, 21372-21383.	1.6	57
31	Starch metabolism mutants in barley: A TILLING approach. Plant Genetic Resources: Characterisation and Utilisation, 2011, 9, 170-173.	0.4	7
32	Thioredoxin-regulated Î²-amylase (BAM1) triggers diurnal starch degradation in guard cells, and in mesophyll cells under osmotic stress. Journal of Experimental Botany, 2011, 62, 545-555.	2.4	182
33	The Skeletal Organic Matrix from Mediterranean Coral Balanophyllia europaea Influences Calcium Carbonate Precipitation. PLoS ONE, 2011, 6, e22338.	1.1	69
34	In vitro characterization of Arabidopsis CP12 isoforms reveals common biochemical and molecular properties. Journal of Plant Physiology, 2010, 167, 939-950.	1.6	39
35	Prompt and Easy Activation by Specific Thioredoxins of Calvin Cycle Enzymes of Arabidopsis thaliana Associated in the GAPDH/CP12/PRK Supramolecular Complex. Molecular Plant, 2009, 2, 259-269.	3.9	136
36	Spontaneous Assembly of Photosynthetic Supramolecular Complexes as Mediated by the Intrinsically Unstructured Protein CP12. Journal of Biological Chemistry, 2008, 283, 1831-1838.	1.6	69

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37	Redox Regulation of a Novel Plastid-Targeted Î²-Amylase of Arabidopsis. Plant Physiology, 2006, 141, 840-850.	2.3	144
38	Reconstitution and Properties of the Recombinant Glyceraldehyde-3-Phosphate Dehydrogenase/CP12/Phosphoribulokinase Supramolecular Complex of Arabidopsis. Plant Physiology, 2005, 139, 1433-1443.	2.3	74
39	Regulation of Photosynthetic GAPDH Dissected by Mutants. Plant Physiology, 2005, 138, 2210-2219.	2.3	52
40	Systemic resistance induced by benzothiadiazole in pear inoculated with the agent of fire blight (Erwinia amylovora). Scientia Horticulturae, 2004, 101, 269-279.	1.7	35
41	Coenzyme Site-directed Mutants of Photosynthetic A4-GAPDH Show Selectively Reduced NADPH-dependent Catalysis, Similar to Regulatory AB-GAPDH Inhibited by Oxidized Thioredoxin. Journal of Molecular Biology, 2004, 340, 1025-1037.	2.0	40
42	The C-terminal Extension of Glyceraldehyde-3-phosphate Dehydrogenase Subunit B Acts as an Autoinhibitory Domain Regulated by Thioredoxins and Nicotinamide Adenine Dinucleotide. Journal of Biological Chemistry, 2002, 277, 44946-44952.	1.6	97
43	Purification of cytochrome b-561 from bean hypocotyls plasma membrane. Evidence for the presence of two heme centers. Biochimica Et Biophysica Acta - Biomembranes, 2000, 1468, 1-5.	1.4	29
44	The specificity of mitochondrial complex I for ubiquinones. Biochemical Journal, 1996, 313, 327-334.	1.7	87