

# Francesca Sparla

## List of Publications by Year in descending order

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44  
papers

2,457  
citations

201575

27  
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243529

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47  
all docs

47  
docs citations

47  
times ranked

2693  
citing authors

#	ARTICLE	IF	CITATIONS
1	Redox regulation of the Calvin-Benson cycle: something old, something new. <i>Frontiers in Plant Science</i> , 2013, 4, 470.	1.7	355
2	Thioredoxin-regulated $\beta$ -amylase (BAM1) triggers diurnal starch degradation in guard cells, and in mesophyll cells under osmotic stress. <i>Journal of Experimental Botany</i> , 2011, 62, 545-555.	2.4	182
3	$\beta$ -amylase 1 (BAM1) degrades transitory starch to sustain proline biosynthesis during drought stress. <i>Journal of Experimental Botany</i> , 2016, 67, 1819-1826.	2.4	156
4	Redox Regulation of a Novel Plastid-Targeted $\beta$ -Amylase of Arabidopsis. <i>Plant Physiology</i> , 2006, 141, 840-850.	2.3	144
5	Prompt and Easy Activation by Specific Thioredoxins of Calvin Cycle Enzymes of Arabidopsis thaliana Associated in the GAPDH/CP12/PRK Supramolecular Complex. <i>Molecular Plant</i> , 2009, 2, 259-269.	3.9	136
6	The C-terminal Extension of Glyceraldehyde-3-phosphate Dehydrogenase Subunit B Acts as an Autoinhibitory Domain Regulated by Thioredoxins and Nicotinamide Adenine Dinucleotide. <i>Journal of Biological Chemistry</i> , 2002, 277, 44946-44952.	1.6	97
7	Redox Homeostasis in Photosynthetic Organisms: Novel and Established Thiol-Based Molecular Mechanisms. <i>Antioxidants and Redox Signaling</i> , 2019, 31, 155-210.	2.5	95
8	The specificity of mitochondrial complex I for ubiquinones. <i>Biochemical Journal</i> , 1996, 313, 327-334.	1.7	87
9	Arabidopsis thaliana AMY3 Is a Unique Redox-regulated Chloroplastic $\beta$ -Amylase. <i>Journal of Biological Chemistry</i> , 2013, 288, 33620-33633.	1.6	79
10	Reconstitution and Properties of the Recombinant Glyceraldehyde-3-Phosphate Dehydrogenase/CP12/Phosphoribulokinase Supramolecular Complex of Arabidopsis. <i>Plant Physiology</i> , 2005, 139, 1433-1443.	2.3	74
11	Spontaneous Assembly of Photosynthetic Supramolecular Complexes as Mediated by the Intrinsically Unstructured Protein CP12. <i>Journal of Biological Chemistry</i> , 2008, 283, 1831-1838.	1.6	69
12	The Skeletal Organic Matrix from Mediterranean Coral <i>Balanophyllia europaea</i> Influences Calcium Carbonate Precipitation. <i>PLoS ONE</i> , 2011, 6, e22338.	1.1	69
13	New Starch Phenotypes Produced by TILLING in Barley. <i>PLoS ONE</i> , 2014, 9, e107779.	1.1	59
14	Conformational Selection and Folding-upon-binding of Intrinsically Disordered Protein CP12 Regulate Photosynthetic Enzymes Assembly. <i>Journal of Biological Chemistry</i> , 2012, 287, 21372-21383.	1.6	57
15	Combining mutations at genes encoding key enzymes involved in starch synthesis affects the amylose content, carbohydrate allocation and hardness in the wheat grain. <i>Plant Biotechnology Journal</i> , 2018, 16, 1723-1734.	4.1	57
16	Impact of Drought on Soluble Sugars and Free Proline Content in Selected Arabidopsis Mutants. <i>Biology</i> , 2020, 9, 367.	1.3	57
17	Calvin-Benson cycle regulation is getting complex. <i>Trends in Plant Science</i> , 2021, 26, 898-912.	4.3	57
18	CP12-mediated protection of Calvin-Benson cycle enzymes from oxidative stress. <i>Biochimie</i> , 2014, 97, 228-237.	1.3	55

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19	Regulation of Photosynthetic GAPDH Dissected by Mutants. <i>Plant Physiology</i> , 2005, 138, 2210-2219.	2.3	52
20	Redox Regulation of Starch Metabolism. <i>Frontiers in Plant Science</i> , 2018, 9, 1344.	1.7	52
21	New insights into redox control of starch degradation. <i>Current Opinion in Plant Biology</i> , 2015, 25, 1-9.	3.5	47
22	Coenzyme Site-directed Mutants of Photosynthetic A4-GAPDH Show Selectively Reduced NADPH-dependent Catalysis, Similar to Regulatory AB-GAPDH Inhibited by Oxidized Thioredoxin. <i>Journal of Molecular Biology</i> , 2004, 340, 1025-1037.	2.0	40
23	In vitro characterization of Arabidopsis CP12 isoforms reveals common biochemical and molecular properties. <i>Journal of Plant Physiology</i> , 2010, 167, 939-950.	1.6	39
24	Systemic resistance induced by benzothiadiazole in pear inoculated with the agent of fire blight ( <i>Erwinia amylovora</i> ). <i>Scientia Horticulturae</i> , 2004, 101, 269-279.	1.7	35
25	Tuning Cysteine Reactivity and Sulfenic Acid Stability by Protein Microenvironment in Glyceraldehyde-3-Phosphate Dehydrogenases of <i>Arabidopsis thaliana</i> . <i>Antioxidants and Redox Signaling</i> , 2016, 24, 502-517.	2.5	31
26	Biom mineralization in Mediterranean Corals: The Role of the Intraskel etal Organic Matrix. <i>Crystal Growth and Design</i> , 2014, 14, 4310-4320.	1.4	30
27	Purification of cytochrome b-561 from bean hypocotyls plasma membrane. Evidence for the presence of two heme centers. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2000, 1468, 1-5.	1.4	29
28	<i>Arabidopsis</i> and <i>Chlamydomonas</i> phosphoribulokinase crystal structures complete the redox structural proteome of the Calvin-Benson cycle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 8048-8053.	3.3	25
29	Structural and Biochemical Insights into the Reactivity of Thioredoxin h1 from <i>Chlamydomonas reinhardtii</i> . <i>Antioxidants</i> , 2019, 8, 10.	2.2	24
30	Direct Recording of Trans-Plasma Membrane Electron Currents Mediated by a Member of the Cytochrome b561 Family of Soybean. <i>Plant Physiology</i> , 2015, 169, 986-995.	2.3	21
31	Role of the NAD(P)H quinone oxidoreductase NQR and the cytochrome b AIR12 in controlling superoxide generation at the plasma membrane. <i>Planta</i> , 2017, 245, 807-817.	1.6	17
32	The Thioredoxin-Regulated $\alpha$ -Amylase 3 of <i>Arabidopsis thaliana</i> Is a Target of S-Glutathionylation. <i>Frontiers in Plant Science</i> , 2019, 10, 993.	1.7	17
33	How Are Cytochrome b561 Electron Currents Controlled by Membrane Voltage and Substrate Availability?. <i>Antioxidants and Redox Signaling</i> , 2014, 21, 384-391.	2.5	15
34	The down-regulation of the genes encoding Isoamylase 1 alters the starch composition of the durum wheat grain. <i>Plant Science</i> , 2016, 252, 230-238.	1.7	14
35	Unravelling the shape and structural assembly of the photosynthetic GAPDH-CP12-PRK complex from <i>Arabidopsis thaliana</i> by small-angle X-ray scattering analysis. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 2372-2385.	2.5	13
36	Influence of proteins on mechanical properties of a natural chitin-protein composite. <i>Acta Biomaterialia</i> , 2021, 120, 81-90.	4.1	13

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37	AIR12, a b-type cytochrome of the plasma membrane of <i>Arabidopsis thaliana</i> is a negative regulator of resistance against <i>Botrytis cinerea</i> . <i>Plant Science</i> , 2015, 233, 32-43.	1.7	10
38	The analysis of the different functions of starchâ€phosphorylating enzymes during the development of <i>Arabidopsis thaliana</i> plants discloses an unexpected role for the cytosolic isoform GWD2. <i>Physiologia Plantarum</i> , 2017, 160, 447-457.	2.6	10
39	A Plant Bioreactor for the Synthesis of Carbon Nanotube Bionic Nanocomposites. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 560349.	2.0	10
40	Photosynthetic properties of spring geophytes assessed by chlorophyll fluorescence analysis. <i>Plant Physiology and Biochemistry</i> , 2017, 118, 510-518.	2.8	9
41	Crystal structure of chloroplastic thioredoxin z defines a typeâ€specific target recognition. <i>Plant Journal</i> , 2021, 107, 434-447.	2.8	8
42	Starch metabolism mutants in barley: A TILLING approach. <i>Plant Genetic Resources: Characterisation and Utilisation</i> , 2011, 9, 170-173.	0.4	7
43	Electron current recordings in living cells. <i>Biophysical Chemistry</i> , 2017, 229, 57-61.	1.5	3
44	The skeleton of <i>Balanophyllia</i> coral species suggests adaptive traits linked to the onset of mixotrophy. <i>Science of the Total Environment</i> , 2021, 795, 148778.	3.9	1