Jose A Navarro

List of Publications by Year
in descending order

112 papers	3,029 citations	109321 35 h-index	197818 49 g-index
112 all docs	112 docs citations	112 times ranked	2048 citing authors

#	Article	IF	Citations
1	Laser-Flash Kinetic Analysis of the Fast Electron Transfer from Plastocyanin and Cytochrome c6 to Photosystem I. Experimental Evidence on the Evolution of the Reaction Mechanism. Biochemistry, 1995, 34, 11321-11326.	2.5	151
2	Ab initio determination of the crystal structure of cytochrome c6 and comparison with plastocyanin. Structure, 1995, 3, 1159-1169.	3.3	146
3	Electron Transfer between Membrane Complexes and Soluble Proteins in Photosynthesis. Accounts of Chemical Research, 2003, 36, 798-805.	15.6	131
4	A new function for an old cytochrome?. Nature, 2003, 424, 33-34.	27.8	118
5	Structural and Functional Analysis of Novel Human Cytochrome c Targets in Apoptosis. Molecular and Cellular Proteomics, 2014, 13, 1439-1456.	3.8	74
6	The Efficient Functioning of Photosynthesis and Respiration in Synechocystis sp. PCC 6803 Strictly Requires the Presence of either Cytochrome c6 or Plastocyanin. Journal of Biological Chemistry, 2004, 279, 7229-7233.	3.4	73
7	An evolutionary analysis of the reaction mechanisms of photosystem I reduction by cytochrome c6 and plastocyanin. Bioelectrochemistry, 2002, 55, 41-45.	4.6	66
8	Laser flash photolysis studies of the kinetics of reduction of ferredoxins and ferredoxin-NADP+ reductases from Anabaena PCC 7119 and spinach: Electrostatic effects on intracomplex electron transfer. Archives of Biochemistry and Biophysics, 1991, 287, 351-358.	3.0	64
9	Co-evolution of cytochrome c 6 and plastocyanin, mobile proteins transferring electrons from cytochrome b 6fâ€Š to photosystem I. Journal of Biological Inorganic Chemistry, 1997, 2, 11-22.	2.6	63
10	Proteomic analyses of the response of cyanobacteria to different stress conditions. FEBS Letters, 2009, 583, 1753-1758.	2.8	59
11	A Comparative Thermodynamic Analysis by Laser-Flash Absorption Spectroscopy of Photosystem I Reduction by Plastocyanin and Cytochrome c6 in Anabaena PCC 7119, Synechocystis PCC 6803, and Spinach. Biochemistry, 1996, 35, 2693-2698.	2.5	58
12	New Arabidopsis thaliana Cytochrome c Partners: A Look Into the Elusive Role of Cytochrome c in Programmed Cell Death in Plants. Molecular and Cellular Proteomics, 2013, 12, 3666-3676.	3.8	58
13	Laser flash kinetic analysis of Synechocystis PCC 6803 cytochrome c6 and plastocyanin oxidation by Photosystem I. Biochimica Et Biophysica Acta - Bioenergetics, 1994, 1184, 235-241.	1.0	57
14	A comparative structural and functional analysis of cyanobacterial plastocyanin and cytochrome c (6) as alternative electron donors to Photosystem I. Photosynthesis Research, 2003, 75, 97-110.	2.9	55
15	Iron Deficiency Induces a Partial Inhibition of the Photosynthetic Electron Transport and a High Sensitivity to Light in the Diatom Phaeodactylum tricornutum. Frontiers in Plant Science, 2016, 7, 1050.	3.6	54
16	The 2.15 Ã... crystal structure of a triple mutant plastocyanin from the cyanobacterium Synechocystis sp. PCC 6803 1 1Edited by R. Huber. Journal of Molecular Biology, 1998, 275, 327-336.	4.2	45
17	Effect of Nitration on the Physicochemical and Kinetic Features of Wild-Type and Monotyrosine Mutants of Human Respiratory Cytochrome c. Biochemistry, 2008, 47, 12371-12379.	2.5	45
18	Cloning and Correct Expression inEscherichia coliof thepetE andpetJ Genes Respectively Encoding Plastocyanin and Cytochromec6from the CyanobacteriumAnabaenasp. PCC 7119. Biochemical and Biophysical Research Communications, 1998, 243, 302-306.	2.1	43

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19	Site-directed Mutagenesis of Cytochromec 6 from Synechocystissp. PCC 6803. Journal of Biological Chemistry, 1999, 274, 13292-13297.	3.4	43
20	Acetylsalicylic acid induces programmed cell death in Arabidopsis cell cultures. Planta, 2008, 228, 89-97.	3.2	43
21	Purification and Physicochemical Properties of the Low Potential Cytochrome C549 from the Cyanobacterium Synechocystis Sp PCC 6803. Archives of Biochemistry and Biophysics, 1995, 318, 46-52.	3.0	42
22	Changes in the Reaction Mechanism of Electron Transfer from Plastocyanin to Photosystem I in the CyanobacteriumSynechocystissp. PCC 6803 As Induced by Site-Directed Mutagenesis of the Copper Proteinâ€. Biochemistry, 1997, 36, 10125-10130.	2.5	42
23	A Single Arginyl Residue in Plastocyanin and in Cytochrome c6 from the Cyanobacterium Anabaenasp. PCC 7119 Is Required for Efficient Reduction of Photosystem I. Journal of Biological Chemistry, 2001, 276, 601-605.	3.4	42
24	A laser flash absorption spectroscopy study of Anabaena sp. PCC 7119 flavodoxin photoreduction by photosystem I particles from spinach. FEBS Letters, 1992, 313, 239-242.	2.8	41
25	A comparative laser-flash absorption spectroscopy study of Anabaena PCC 7119 plastocyanin and cytochrome c6 photooxidation by photosystem I particles. FEBS Journal, 1993, 213, 1133-1138.	0.2	41
26	Cloning and correct expression inE. coliof thepetJ gene encoding cytochromec6fromSynechocystis6803. FEBS Letters, 1994, 347, 173-177.	2.8	41
27	Solution Structure of Oxidized Cytochrome c6 from the Green Alga Monoraphidium braunii,. Biochemistry, 1998, 37, 4831-4843.	2.5	40
28	Site-directed Mutagenesis of Cytochromec 6 from Anabaena Species PCC 7119. Journal of Biological Chemistry, 1999, 274, 33565-33570.	3.4	40
29	Crystal structure of low-potential cytochrome c 549 from Synechocystis sp. PCC 6803 at 1.21ÂÃ... resolution. Journal of Biological Inorganic Chemistry, 2001, 6, 324-332.	2.6	40
30	Cytochrome c6 from Monoraphidium braunii. A cytochrome with an unusual heme axial coordination. FEBS Journal, 1993, 216, 329-341.	0.2	39
31	Oxidizing Side of the Cyanobacterial Photosystem I. Journal of Biological Chemistry, 1999, 274, 19048-19054.	3.4	39
32	ArsH from the Cyanobacterium Synechocystis sp. PCC 6803 Is an Efficient NADPH-Dependent Quinone Reductase. Biochemistry, 2012, 51, 1178-1187.	2.5	39
33	Site-Specific Mutagenesis Demonstrates That the Structural Requirements for Efficient Electron Transfer in Anabaena Ferredoxin and Flavodoxin Are Highly Dependent on the Reaction Partner: Kinetic Studies with Photosystem I, Ferredoxin:NADP+ Reductase, and Cytochrome c. Archives of Biochemistry and Biophysics, 1995, 321, 229-238.	3.0	38
34	Synechocystis6803 plastocyanin isolated from both the cyanobacterium andE. colitransformed cells are identical. FEBS Letters, 1993, 319, 257-260.	2.8	37
35	Flavodoxin: A compromise between efficiency and versatility in the electron transfer from Photosystem I to Ferredoxin-NADP+ reductase. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 144-154.	1.0	37
36	Specific nitration of tyrosines 46 and 48 makes cytochrome c assemble a nonâ€functional apoptosome. FEBS Letters, 2012, 586, 154-158.	2.8	35

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37	Anabaena sp. PCC 7119 Flavodoxin as Electron Carrier from Photosystem I to Ferredoxin-NADP+Reductase. Journal of Biological Chemistry, 2002, 277, 22338-22344.	3.4	31
38	Electron Transfer Pathways and Dynamics of Chloroplast NADPH-dependent Thioredoxin Reductase C (NTRC). Journal of Biological Chemistry, 2012, 287, 33865-33872.	3.4	31
39	Laser Flash-Induced Kinetic Analysis of Cytochrome f Oxidation by Wild-Type and Mutant Plastocyanin from the Cyanobacterium Nostoc sp. PCC 7119. Biochemistry, 2005, 44, 11601-11607.	2.5	30
40	Flavodoxin-Mediated Electron Transfer from Photosystem I to Ferredoxin-NADP⁺ Reductase in Anabaena:â€‰ Role of Flavodoxin Hydrophobic Residues in Proteinâ^'Protein Interactions. Biochemistry, 2008, 47, 1207-1217.	2.5	30
41	Kinetics of electron transfer from thioredoxin reductase to thioredoxin. Biochemistry, 1991, 30, 2192-2195.	2.5	29
42	A thermodynamic study by laser-flash photolysis of plastocyanin and cytochrome c6 oxidation by photosystem I from the green alga Monoraphidium braunii. FEBS Journal, 1994, 222, 1001-1007.	0.2	29
43	Role of Hydrophobic Interactions in the Flavodoxin Mediated Electron Transfer from Photosystem I to Ferredoxin-NADP+Reductase inAnabaenaPCC 7119â€. Biochemistry, 2003, 42, 2036-2045.	2.5	29
44	A LASER FLASH SPECTROSCOPY STUDY OF THE KINETICS OF ELECTRON TRANSFER FROM SPINACH PHOTOSYSTEM I TO SPINACH AND ALGAL FERREDOXINS. Photochemistry and Photobiology, 1992, 56, 319-324.	2.5	28
45	A comparative structural and functional analysis of cytochromecM, cytochromec6and plastocyanin from the cyanobacteriumSynechocystissp. PCC 6803. FEBS Letters, 2002, 517, 50-54.	2.8	27
46	Molecular recognition in the interaction of chloroplast 2â€Cys peroxiredoxin with NADPHâ€thioredoxin reductase C (NTRC) and thioredoxin x. FEBS Letters, 2014, 588, 4342-4347.	2.8	25
47	AnabaenaFlavodoxin as an Electron Carrier from Photosystem I to Ferredoxin-NADP+Reductase. Role of Flavodoxin Residues in Proteinâ^'Protein Interaction and Electron Transferâ€. Biochemistry, 2005, 44, 97-104.	2.5	24
48	Respiratory cytochromecoxidase can be efficiently reduced by the photosynthetic redox proteins cytochromec6and plastocyanin in cyanobacteria. FEBS Letters, 2005, 579, 3565-3568.	2.8	24
49	Coupling of Solar Energy to Hydrogen Peroxide Production in the Cyanobacterium Anacystis nidulans. Applied and Environmental Microbiology, 1989, 55, 483-487.	3.1	24
50	A comparative kinetic analysis of the reactivity of plant, horse, and human respiratory cytochrome c towards cytochrome c oxidase. Biochemical and Biophysical Research Communications, 2006, 346, 1108-1113.	2.1	23
51	Laser flash photolysis studies of the kinetics of reduction of spinach and Clostridium ferredoxins by a viologen analog: electrostatically controlled nonproductive complex formation and differential reactivity among the iron-sulfur clusters. Biochemistry, 1989, 28, 6057-6065.	2.5	22
52	Cyanobacterial Photosystem I lacks specificity in its interaction with cytochrome c6 electron donors. Photosynthesis Research, 2005, 83, 329-333.	2.9	22
53	Endophytic Colonization of Rice (Oryza sativa L.) by the Symbiotic Strain Nostoc punctiforme PCC 73102. Molecular Plant-Microbe Interactions, 2020, 33, 1040-1045.	2.6	21
54	A proteomic approach to iron and copper homeostasis in cyanobacteria. Briefings in Functional Genomics & Proteomics, 2008, 6, 322-329.	3.8	19

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55	Communication between <scp>L</scp>â€“galactonoâ€“1,4â€“lactone dehydrogenase and cytochrome c. FEBS Journal, 2013, 280, 1830-1840.	4.7	19
56	The Specificity in the Interaction between Cytochrome f and Plastocyanin from the Cyanobacterium Nostoc sp. PCC 7119 Is Mainly Determined by the Copper Protein. Biochemistry, 2007, 46, 997-1003.	2.5	18
57	Dual role of FMN in flavodoxin function: Electron transfer cofactor and modulation of the proteinâ€“protein interaction surface. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 262-271.	1.0	18
58	Transient kinetics of flavin-photosensitized oxidation of reduced redox proteins. Comparison of c-type cytochromes and plastocyanins. FEBS Journal, 1991, 199, 239-243.	0.2	17
59	A Thermal Unfolding Study of Plastocyanin from the Thermophilic Cyanobacterium Phormidium laminosum. Biochemistry, 2004, 43, 14784-14791.	2.5	17
60	A hydrogen bond network in the active site of Anabaena ferredoxin-NADP+ reductase modulates its catalytic efficiency. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 251-263.	1.0	16
61	A Laser Flash-Induced Kinetic Analysis of in Vivo Photosystem I Reduction by Site-Directed Mutants of Plastocyanin and Cytochromec6inSynechocystissp. PCC 6803â€. Biochemistry, 2006, 45, 1054-1060.	2.5	15
62	Carbon dioxide-mediated decomposition of hydrogen peroxide in alkaline solutions. Journal of the Chemical Society Faraday Transactions I, 1984, 80, 249.	1.0	14
63	Cytochrome c6 is the main respiratory and photosynthetic soluble electron donor in heterocysts of the cyanobacterium Anabaena sp. PCC 7120. Biochimica Et Biophysica Acta - Bioenergetics, 2019, 1860, 60-68.	1.0	14
64	Convergent Evolution of Cytochrome c6 and Plastocyanin. , 2006, , 683-696.		14
65	Hydrogen peroxide photoproduction by the semicarbazideâ€”tris(2,2â€²-bipyridine)ruthenium(II)â€”oxygen system. Journal of Photochemistry and Photobiology A: Chemistry, 1987, 40, 279-293.	3.9	13
66	Flavin-photosensitized oxidation of reduced c-type cytochromes. Reaction mechanism and comparison with photoreduction of oxidized cytochromes by flavin semiquinones. FEBS Journal, 1990, 191, 531-536.	0.2	13
67	Title is missing!. Photosynthesis Research, 1998, 57, 93-100.	2.9	13
68	In vivo photosystem I reduction in thermophilic and mesophilic cyanobacteria: The thermal resistance of the process is limited by factors other than the unfolding of the partners. Biochemical and Biophysical Research Communications, 2005, 334, 170-175.	2.1	13
69	Flavin-mediated photoregulation of nitrate reductase. Bioelectrochemistry, 1989, 22, 355-364.	1.0	12
70	A comparative study of the thermal stability of plastocyanin, cytochrome c(6) and Photosystem I in thermophilic and mesophilic cyanobacteria. Photosynthesis Research, 2001, 70, 281-289.	2.9	12
71	The Unique Proline of the Prochlorothrix hollandica Plastocyanin Hydrophobic Patch Impairs Electron Transfer to Photosystem I. Journal of Biological Chemistry, 2001, 276, 37501-37505.	3.4	12
72	Role of electrostatics in the interaction between plastocyanin and photosystemâ€ƒI of the cyanobacterium Phormidium laminosum. FEBS Journal, 2002, 269, 5893-5902.	0.2	12

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73	Redox properties of Arabidopsis cytochrome c6 are independent of the loop extension specific to higher plants. Biochimica Et Biophysica Acta - Bioenergetics, 2004, 1657, 115-120.	1.0	12
74	Photosensitized electron transfer reactions of cytochrome c4 from Pseudomonas stutzeri with flavins and methyl viologen. Inorganica Chimica Acta, 1998, 272, 109-114.	2.4	11
75	Thermal Unfolding of Plastocyanin from the Mesophilic Cyanobacterium Synechocystis sp. PCC 6803 and Comparison with Its Thermophilic Counterpart from Phormidium laminosum. Biochemistry, 2006, 45, 4900-4906.	2.5	11
76	Plastocyanin and Cytochromec6: the Soluble Electron Carriers between the Cytochromeb6f Complex and Photosystem I. , 0, , 181-200.		11
77	Light-driven hydrogen peroxide production as a way to solar energy conversion. Bioelectrochemistry, 1987, 18, 71-78.	1.0	10
78	LASER FLASH-INDUCED PHOTOREDUCTION OF PHOTOSYNTHETIC FERREDOXINS AND FLAVODOXIN BY 5-DEAZARIBOFLAVIN AND BY A. Photochemistry and Photobiology, 1994, 60, 231-236.	2.5	10
79	Effect of crowding on the electron transfer process from plastocyanin and cytochrome c6 to photosystem I: a comparative study from cyanobacteria to green algae. Photosynthesis Research, 2011, 107, 279-286.	2.9	10
80	Solar energy conversion from water photolysis by biological and chemical systems. Applied Biochemistry and Biotechnology, 1991, 30, 61-81.	2.9	9
81	Photosystem I Reduction in Diatoms: As Complex as the Green Lineage Systems but Less Efficient. Biochemistry, 2013, 52, 8687-8695.	2.5	9
82	The heterologous expression of a plastocyanin in the diatom Phaeodactylum tricornutum improves cell growth under ironâ€deficient conditions. Physiologia Plantarum, 2021, 171, 277-290.	5.2	9
83	FLAVINâ€MEDIATED PRODUCTION OF HYDROGEN PEROXIDE IN PHOTOELECTROCHEMICAL CELLS. Photochemistry and Photobiology, 1984, 40, 395-398.	2.5	8
84	Functional characterization of the evolutionarily divergent fern plastocyanin. FEBS Journal, 2004, 271, 3449-3456.	0.2	8
85	POTENTIOMETRIC and LASER FLASH PHOTOLYSIS STUDIES OF THE pH DEPENDENCE OF HYDROGEN PEROXIDE PRODUCTION BY THE SEMICARBAZIDE/LUMIFLAVIN/OXYGEN PHOTOSYSTEM. Photochemistry and Photobiology, 1987, 46, 965-970.	2.5	7
86	Hydrogen peroxide photoproduction sensitized with rose bengal with semicarbazide as the electron source. Journal of Photochemistry and Photobiology A: Chemistry, 1988, 45, 341-353.	3.9	7
87	Cytochromec6from the green algaMonoraphidium braunii. Crystallization and preminary diffraction studies. Acta Crystallographica Section D: Biological Crystallography, 1995, 51, 232-234.	2.5	7
88	Mutagenesis of Prochlorothrix Plastocyanin Reveals Additional Features in Photosystem I Interactions. Journal of Biological Chemistry, 2003, 278, 8179-8183.	3.4	7
89	New Insights into the Evolution of the Electron Transfer from Cytochrome f to Photosystem I in the Green and Red Branches of Photosynthetic Eukaryotes. Plant and Cell Physiology, 2021, 62, 1082-1093.	3.1	7
90	Purification of Plastocyanin and Cytochrome c 6 from Plants, Green Algae, and Cyanobacteria. Methods in Molecular Biology, 2011, 684, 79-94.	0.9	6

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91	Probing the reactivity of different forms of azurin by flavin photoreduction. FEBS Journal, 2011, 278, 1506-1521.	4.7	6
92	The photosynthetic cytochrome c 550 from the diatom Phaeodactylum tricornutum. Photosynthesis Research, 2017, 133, 273-287.	2.9	6
93	On the reaction mechanism of flavin-sensitized photoregulation of Monoraphidium braunii nitrate reductase. Journal of Photochemistry and Photobiology B: Biology, 1991, 10, 211-220.	3.8	5
94	A Comparative Kinetic Analysis of the Flavin-Photosensitized Oxidation and Reduction of Plastocyanin and Cytochrome c6from Different Organisms. Photochemistry and Photobiology, 1996, 63, 86-91.	2.5	5
95	Reduction of photosystem I by cytochrome c6 and plastocyanin: molecular recognition and reaction mechanism. Bioelectrochemistry, 1997, 42, 249-254.	1.0	5
96	Negatively charged residues in the H loop of PsaB subunit in Photosystem I from Synechocystis sp. PCC 6803 appear to be responsible for electrostatic repulsions with plastocyanin*. Photosynthesis Research, 2000, 65, 63-68.	2.9	5
97	Interaction of photosystem I from Phaeodactylum tricornutum with plastocyanins as compared with its native cytochrome c6: Reunion with a lost donor. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 1549-1559.	1.0	5
98	External loops at the ferredoxin-NADP+ reductase proteinâ€“partner binding cavity contribute to substrates allocation. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 296-305.	1.0	4
99	Steady-state and laser flash induced photoreduction of yeast glutathione reductase by 5-deazariboflavin and by a viologen analog: stabilization of flavin adenine dinucleotide semiquinone species by complexation. Biochemistry, 1990, 29, 6102-6107.	2.5	3
100	Mutations in both leucine 12 and lysine 33 in plastocyanin from Synechocystis sp. PCC 6803 induce drastic changes in the hydrophobic interactions with Photosystem I. Photosynthesis Research, 2002, 72, 223-230.	2.9	3
101	Cytc6-3: A New Isoform of Photosynthetic Cytc6Exclusive to Heterocyst-Forming Cyanobacteria. Plant and Cell Physiology, 2016, 58, pcw184.	3.1	3
102	Flavin-mediated photoregulation of nitrate reductase. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1989, 276, 355-364.	0.1	2
103	Title is missing!. Photosynthesis Research, 1999, 62, 241-250.	2.9	2
104	Purification of Plastocyanin and Cytochrome <I>c_{6</I>} From Plants, Green Algae, and Cyanobacteria. , 2004, 274, 079-092.		2
105	The Convergent Evolution of Cytochrome c 6 and Plastocyanin Has Been Driven by Geochemical Changes. , 2011, , 607-630.		2
106	From Cytochrome C6 to Plastocyanin. An Evolutionary Approach. , 1998, , 1499-1504.		2
107	The singular properties of photosynthetic cytochrome c 550 from the diatom Phaeodactylum tricornutum suggest new alternative functions. Physiologia Plantarum, 2019, 166, 199-210.	5.2	1
108	Electron transfer reactions in both the oxidizing and reducing sites of photosystem I. Bioelectrochemistry, 1992, 28, 205-212.	1.0	0

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109	Electron Transfer Between Membrane Complexes and Soluble Proteins in Photosynthesis. ChemInform, 2004, 35, no.	0.0	0
110	Structural and functional changes induced by tyrosine nitration in cytochrome c, a bi-functional protein. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 70.	1.0	0
111	Flavin Laser Flash Photolysis Studies of the Electron Transfer Mechanism in Redox Proteins. , 1992, , 319-331.		0
112	Adaptation of cyanobacterial photosynthesis to metal constraints. , 2022, , 109-128.		0