Marta MartÃ-nez-JÃºlvez

List of Publications by Year
in descending order

67 papers	1,657 citations	236833 25 h-index	315616 38 g-index
69 all docs	69 docs citations	69 times ranked	1609 citing authors

#	Article	IF	Citations
1	Structureâ˘'Function Relationships in Anabaena Ferredoxin:â€‰ Correlations between X-ray Crystal Structures, Reduction Potentials, and Rate Constants of Electron Transfer to Ferredoxin:NADP+ Reductase for Site-Specific Ferredoxin Mutants,. Biochemistry, 1997, 36, 11100-11117.	1.2	106
2	Involvement of Glutamic Acid 301 in the Catalytic Mechanism of Ferredoxin-NADP+Reductase fromAnabaenaPCC 7119â€. Biochemistry, 1998, 37, 2715-2728.	1.2	96
3	Structural Insights into the Mechanism of Protein O-Fucosylation. PLoS ONE, 2011, 6, e25365.	1.1	85
4	Structureâ€"function relationships in Anabaena ferredoxin/ferredoxin:NADP+ reductase electron transfer: insights from site-directed mutagenesis, transient absorption spectroscopy and X-ray crystallography. Biochimica Et Biophysica Acta - Bioenergetics, 2002, 1554, 5-21.	0.5	74
5	Electrostatic forces involved in orienting <i>Anabaena</i> ferredoxin during binding to <i>Anabaena</i> ferredoxin:NAdp⁺ reductase: Siteâ€specific mutagenesis, transient kinetic measurements, and electrostatic surface potentials. Protein Science, 1999, 8, 1614-1622.	3.1	57
6	Structural Insights into the Coenzyme Mediated Monomerâ€"Dimer Transition of the Pro-Apoptotic Apoptosis Inducing Factor. Biochemistry, 2014, 53, 4204-4215.	1.2	52
7	C-Terminal Tyrosine of Ferredoxinâ˘'NADP+ Reductase in Hydride Transfer Processes with NAD(P)+/H. Biochemistry, 2005, 44, 13477-13490.	1.2	51
8	Role of Arg100 and Arg264 fromAnabaenaPCC 7119 Ferredoxinâ˘'NADP+Reductase for Optimal NADP+Binding and Electron Transferâ€. Biochemistry, 1998, 37, 17680-17691.	1.2	48
9	Discovery of Specific Flavodoxin Inhibitors as Potential Therapeutic Agents against <i>Helicobacter pylori</i> Infection. ACS Chemical Biology, 2009, 4, 928-938.	1.6	48
10	Lys75 of Anabaena Ferredoxinâ˘'NADP+ Reductase Is a Critical Residue for Binding Ferredoxin and Flavodoxin during Electron Transfer. Biochemistry, 1998, 37, 13604-13613.	1.2	43
11	Structural analysis of FAD synthetase from Corynebacterium ammoniagenes. BMC Microbiology, 2008, 8, 160.	1.3	43
12	Size-dependent properties of magnetoferritin. Nanotechnology, 2010, 21, 465707.	1.3	43
13	Catalytic mechanism of hydride transfer between NADP+/H and ferredoxin-NADP+ reductase from Anabaena PCC 7119. Archives of Biochemistry and Biophysics, 2007, 459, 79-90.	1.4	41
14	Binding Thermodynamics of Ferredoxin:NADP+ Reductase: Two Different Protein Substrates and One Energetics. Biophysical Journal, 2009, 96, 4966-4975.	0.2	41
15	Structure of <scp>R</scp>dx<scp>A</scp>Ââ€"Âan oxygenâ€insensitive nitroreductase essential for metronidazole activation in <i><scp>H</scp>elicobacterÂpylori</i>. FEBS Journal, 2012, 279, 4306-4317.	2.2	41
16	Flavoenzyme-catalyzed redox cycling of hydroxylamino- and amino metabolites of 2,4,6-trinitrotoluene: implications for their cytotoxicity. Archives of Biochemistry and Biophysics, 2004, 425, 184-192.	1.4	40
17	Oligomeric State in the Crystal Structure of Modular FAD Synthetase Provides Insights into Its Sequential Catalysis in Prokaryotes. Journal of Molecular Biology, 2010, 400, 218-230.	2.0	40
18	Role of a Cluster of Hydrophobic Residues Near the FAD Cofactor in Anabaena PCC 7119 Ferredoxin-NADP+Reductase for Optimal Complex Formation and Electron Transfer to Ferredoxin. Journal of Biological Chemistry, 2001, 276, 27498-27510.	1.6	37

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19	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.	0.5	37
20	Involvement of the Pyrophosphate and the 2â€²-Phosphate Binding Regions of Ferredoxin-NADP+ Reductase in Coenzyme Specificity. Journal of Biological Chemistry, 2003, 278, 49203-49214.	1.6	34
21	The Prokaryotic FAD Synthetase Family: A Potential Drug Target. Current Pharmaceutical Design, 2013, 19, 2637-2648.	0.9	31
22	Role of Hydrophobic Interactions in the Flavodoxin Mediated Electron Transfer from Photosystem I to Ferredoxin-NADP+Reductase inAnabaenaPCC 7119â€. Biochemistry, 2003, 42, 2036-2045.	1.2	29
23	Ferredoxin-NADP. Journal of Biological Inorganic Chemistry, 1999, 4, 568.	1.1	28
24	An efficient method for enzyme immobilization evidenced by atomic force microscopy. Protein Engineering, Design and Selection, 2012, 25, 715-723.	1.0	27
25	Role of specific residues in coenzyme binding, chargeâ€“transfer complex formation, and catalysis in Anabaena ferredoxin NADP+-reductase. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 1638-1646.	0.5	25
26	Structural insights into the synthesis of FMN in prokaryotic organisms. Acta Crystallographica Section D: Biological Crystallography, 2015, 71, 2526-2542.	2.5	25
27	Structural analysis of interactions for complex formation between Ferredoxin-NADP+ reductase and its protein partners. Proteins: Structure, Function and Bioinformatics, 2005, 59, 592-602.	1.5	24
28	Tuning of the FMN binding and oxido-reduction properties by neighboring side chains in Anabaena flavodoxin. Archives of Biochemistry and Biophysics, 2007, 467, 206-217.	1.4	24
29	Common conformational changes in flavodoxins induced by FMN and anion binding: The structure of <i>Helicobacter pylori</i> apoflavodoxin. Proteins: Structure, Function and Bioinformatics, 2007, 69, 581-594.	1.5	24
30	Key Residues at the Riboflavin Kinase Catalytic Site of the Bifunctional Riboflavin Kinase/FMN Adenylyltransferase From Corynebacterium ammoniagenes. Cell Biochemistry and Biophysics, 2013, 65, 57-68.	0.9	20
31	Protein dynamics promote hydride tunnelling in substrate oxidation by aryl-alcohol oxidase. Physical Chemistry Chemical Physics, 2017, 19, 28666-28675.	1.3	20
32	FAD semiquinone stability regulates single- and two-electron reduction of quinones by Anabaena PCC7119 ferredoxin:NADP+ reductase and its Glu301Ala mutant. Archives of Biochemistry and Biophysics, 2005, 437, 144-150.	1.4	19
33	The FAD synthetase from the human pathogen Streptococcus pneumoniae: a bifunctional enzyme exhibiting activity-dependent redox requirements. Scientific Reports, 2017, 7, 7609.	1.6	19
34	Quaternary organization in a bifunctional prokaryotic FAD synthetase: Involvement of an arginine at its adenylyltransferase module on the riboflavin kinase activity. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 897-906.	1.1	18
35	Nanomechanical Study of Enzyme: Coenzyme Complexes: Bipartite Sites in Plastidic Ferredoxin-NADP+ Reductase for the Interaction with NADP+. Antioxidants, 2022, 11, 537.	2.2	18
36	Overexpression in E. coli of the complete petH gene product from Anabaena: purification and properties of a 49 kDa ferredoxin-NADP+ reductase. BBA - Proteins and Proteomics, 1996, 1297, 200-206.	2.1	17

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37	NADP+ Binding to the Regulatory Subunit of Methionine Adenosyltransferase II Increases Intersubunit Binding Affinity in the Hetero-Trimer. PLoS ONE, 2012, 7, e50329.	1.1	17
38	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.	0.5	16
39	The trimer interface in the quaternary structure of the bifunctional prokaryotic FAD synthetase from Corynebacterium ammoniagenes. Scientific Reports, 2017, 7, 404.	1.6	16
40	Protein-protein interaction in electron transfer reactions: The ferrodoxin/flavodoxin/ferredoxin:NADP+ reductase system from Anabaena. Biochimie, 1998, 80, 837-846.	1.3	15
41	Protein Motifs Involved in Coenzyme Interaction and Enzymatic Efficiency in <i>Anabaena</i> Ferredoxin-NADP⁺ Reductase,. Biochemistry, 2009, 48, 3109-3119.	1.2	15
42	Mechanostability of the Singleâ€Electronâ€Transfer Complexes of <i>Anabaena</i> Ferredoxinâ€“NADP⁺ Reductase. ChemPhysChem, 2015, 16, 3161-3169.	1.0	15
43	Interaction of positively charged amino acid residues of recombinant, cyanobacterial ferredoxin:NADP+ reductase with ferredoxin probed by site directed mutagenesis. Biochimica Et Biophysica Acta - Bioenergetics, 1998, 1363, 85-93.	0.5	14
44	Proline dehydrogenase from Thermus thermophilus does not discriminate between FAD and FMN as cofactor. Scientific Reports, 2017, 7, 43880.	1.6	13
45	An Electrochemical, Kinetic, and Spectroscopic Characterization of [2Feâ€“2S] Vegetative and Heterocyst Ferredoxins fromAnabaena7120 with Mutations in the Cluster Binding Loop. Archives of Biochemistry and Biophysics, 1998, 355, 181-188.	1.4	11
46	Structural backgrounds for the formation of a catalytically competent complex with NADP(H) during hydride transfer in ferredoxinâ€“NADP+ reductases. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1063-1071.	0.5	11
47	Crystallization and preliminary X-ray diffraction studies of FAD synthetase from<i>Corynebacterium ammoniagenes</i>. Acta Crystallographica Section F: Structural Biology Communications, 2009, 65, 1285-1288.	0.7	10
48	Molecular recognition in protein complexes involved in electron transfer. Biochemical Society Transactions, 1996, 24, 111-116.	1.6	8
49	Towards a new interaction enzyme:coenzyme. Biophysical Chemistry, 2005, 115, 219-224.	1.5	8
50	Studying the Allosteric Energy Cycle by Isothermal Titration Calorimetry. Methods in Molecular Biology, 2012, 796, 53-70.	0.4	8
51	Quantitative structure activity relationships for the electron transfer reactions ofAnabaenaPCC 7119 ferredoxin-NADP+oxidoreductase with nitrobenzene and nitrobenzimidazolone derivatives: mechanistic implications. FEBS Letters, 1999, 450, 44-48.	1.3	7
52	Crystal Structure of the FAD-Containing Ferredoxin-NADP^{+}Reductase from the Plant Pathogen<i>Xanthomonas axonopodis</i>pv. citri. BioMed Research International, 2013, 2013, 1-6.	0.9	6
53	Identification of Inhibitors Targeting Ferredoxin-NADP+ Reductase from the Xanthomonas citri subsp. citri Phytopathogenic Bacteria. Molecules, 2018, 23, 29.	1.7	6
54	Towards the competent conformation for catalysis in the ferredoxin-NADP+ reductase from the Brucella ovis pathogen. Biochimica Et Biophysica Acta - Bioenergetics, 2019, 1860, 148058.	0.5	5

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55	Unexpected diversity of ferredoxin-dependent thioredoxin reductases in cyanobacteria. Plant Physiology, 2021, 186, 285-296.	2.3	5
56	External loops at the ferredoxin-NADP+ reductase proteinâ€“partner binding cavity contribute to substrates allocation. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 296-305.	0.5	4
57	Direct examination of the relevance for folding, binding and electron transfer of a conserved protein folding intermediate. Physical Chemistry Chemical Physics, 2017, 19, 19021-19031.	1.3	4
58	Deletion of the 6-kDa subunit affects the activity and yield of the bc1 complex from Rhodovulum sulfidophilum. FEBS Journal, 2000, 267, 3753-3761.	0.2	3
59	Editorial (Hot Topic: Flavoproteins and Flavoenzymes with Biomedical and Therapeutic Impact). Current Pharmaceutical Design, 2013, 19, 2497-2498.	0.9	3
60	Electron Transferases. Methods in Molecular Biology, 2014, 1146, 79-94.	0.4	3
61	Cofactors and pathogens: Flavin mononucleotide and flavin adenine dinucleotide (FAD) biosynthesis by the FAD synthase from Brucella ovis. IUBMB Life, 2021, , .	1.5	3
62	Apoptosis-Inducing Factor 1, Mitochondrial. , 2018, , 361-366.		2
63	Kinetic Characterization of Anabaena Ferredoxin-NADP+ Reductase Mutants. Biochemical Society Transactions, 1996, 24, 33S-33S.	1.6	1
64	Mining the Flavoproteome of Brucella ovis, the Brucellosis Causing Agent in Ovis aries. Microbiology Spectrum, 2022, , e0229421.	1.2	1
65	Characterization of two recombinant forms of ferredoxin-NADP+ reductase from <i>Anabaena</i> PCC 7119 (presentation reference 204). Biochemical Society Transactions, 1996, 24, 36S-36S.	1.6	0
66	Sequence and Phylogenetic Analysis of FAD Synthetase. AIP Conference Proceedings, 2006, , .	0.3	0
67	Apoptosis-Inducing Factor 1, Mitochondrial. , 2016, , 1-7.		0