

Gloria C Ferreira

List of Publications by Year in descending order

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93
papers

2,704
citations

147801

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48
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99
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99
docs citations

99
times ranked

2204
citing authors

#	ARTICLE	IF	CITATIONS
1	Metal ion coordination sites in ferrochelatase. <i>Coordination Chemistry Reviews</i> , 2022, 460, 214464.	18.8	8
2	Cofactors and Coenzymes Heme Synthesis. , 2021, , 356-362.		0
3	The SOUL family of heme-binding proteins: Structure and function 15Âyears later. <i>Coordination Chemistry Reviews</i> , 2021, 448, 214189.	18.8	9
4	5-Aminolevulinate synthase catalysis: The catcher in heme biosynthesis. <i>Molecular Genetics and Metabolism</i> , 2019, 128, 178-189.	1.1	24
5	Iron Hack - A symposium/hackathon focused on porphyrias, Friedreichâ€™s ataxia, and other rare iron-related diseases. <i>F1000Research</i> , 2019, 8, 1135.	1.6	11
6	Ferrochelatase Î€-helix: Implications from examining the role of the conserved Î€-helix glutamates in porphyrin metalation and product release. <i>Archives of Biochemistry and Biophysics</i> , 2018, 644, 37-46.	3.0	4
7	Molecular dynamics analysis of the structural and dynamic properties of the functionally enhanced hepta-variant of mouse 5-aminolevulinate synthase. <i>Journal of Biomolecular Structure and Dynamics</i> , 2018, 36, 152-165.	3.5	4
8	Anti-Correlation between the Dynamics of the Active Site Loop and C-Terminal Tail in Relation to the Homodimer Asymmetry of the Mouse Erythroid 5-Aminolevulinate Synthase. <i>International Journal of Molecular Sciences</i> , 2018, 19, 1899.	4.1	7
9	Isoniazid inhibits human erythroid 5-aminolevulinate synthase: Molecular mechanism and tolerance study with four X-linked protoporphyria patients. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2017, 1863, 428-439.	3.8	12
10	Macromolecular crowders and osmolytes modulate the structural and catalytic properties of alkaline molten globular 5-aminolevulinate synthase. <i>RSC Advances</i> , 2016, 6, 114541-114552.	3.6	2
11	The Structure of the Complex between Yeast Frataxin and Ferrochelatase. <i>Journal of Biological Chemistry</i> , 2016, 291, 11887-11898.	3.4	22
12	Murine erythroid 5-aminolevulinate synthase: Truncation of a disordered N-terminal extension is not detrimental for catalysis. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2016, 1864, 441-452.	2.3	7
13	The conserved active site histidine-glutamate pair of ferrochelatase coordinately catalyzes porphyrin metalation. <i>Journal of Porphyrins and Phthalocyanines</i> , 2016, 20, 556-569.	0.8	2
14	The unfolding pathways of the native and molten globule states of 5-aminolevulinate synthase. <i>Biochemical and Biophysical Research Communications</i> , 2016, 480, 321-327.	2.1	2
15	Murine erythroid 5â€aminolevulinate synthase: Adenosylâ€binding site Lys221 modulates substrate binding and catalysis. <i>FEBS Open Bio</i> , 2015, 5, 824-831.	2.3	6
16	Asn-150 of Murine Erythroid 5-Aminolevulinate Synthase Modulates the Catalytic Balance between the Rates of the Reversible Reaction. <i>Journal of Biological Chemistry</i> , 2015, 290, 30750-30761.	3.4	5
17	Human Erythroid 5-Aminolevulinate Synthase Mutations Associated with X-Linked Protoporphyria Disrupt the Conformational Equilibrium and Enhance Product Release. <i>Biochemistry</i> , 2015, 54, 5617-5631.	2.5	18
18	Expression of Murine 5-Aminolevulinate Synthase Variants Causes Protoporphyrin IX Accumulation and Light-Induced Mammalian Cell Death. <i>PLoS ONE</i> , 2014, 9, e93078.	2.5	17

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19	Unstable Reaction Intermediates and Hysteresis during the Catalytic Cycle of 5-Aminolevulinate Synthase. <i>Journal of Biological Chemistry</i> , 2014, 289, 22915-22925.	3.4	20
20	Catalytically active alkaline molten globular enzyme: Effect of pH and temperature on the structural integrity of 5-aminolevulinate synthase. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2014, 1844, 2145-2154.	2.3	16
21	Toward Heme: 5-Aminolevulinate Synthase and Initiation of Porphyrin Synthesis. <i>Handbook of Porphyrin Science</i> , 2013, , 1-78.	0.8	7
22	The Ultimate Step of Heme Biosynthesis: Orchestration Between Iron Trafficking and Porphyrin Synthesis. <i>Handbook of Porphyrin Science</i> , 2013, , 129-189.	0.8	2
23	Aminolaevulinic acid synthase of <i>Rhodobacter capsulatus</i> : high-resolution kinetic investigation of the structural basis for substrate binding and catalysis. <i>Biochemical Journal</i> , 2013, 451, 205-216.	3.7	19
24	Molecular and functional analysis of the C-terminal region of human erythroid-specific 5-aminolevulinic synthase associated with X-linked dominant protoporphyria (XLDPP). <i>Human Molecular Genetics</i> , 2013, 22, 1280-1288.	2.9	39
25	Handbook of Porphyrin Science (Volume 29). <i>Handbook of Porphyrin Science</i> , 2013, , .	0.8	1
26	Nickel(II) Chelatase Variants Directly Evolved from Murine Ferrochelatase: Porphyrin Distortion and Kinetic Mechanism. <i>Biochemistry</i> , 2011, 50, 1535-1544.	2.5	15
27	Functional asymmetry for the active sites of linked 5-aminolevulinate synthase and 8-amino-7-oxononoate synthase. <i>Archives of Biochemistry and Biophysics</i> , 2011, 511, 107-117.	3.0	7
28	Molecular enzymology of 5-Aminolevulinate synthase, the gatekeeper of heme biosynthesis. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2011, 1814, 1467-1473.	2.3	83
29	ALAS2 acts as a modifier gene in patients with congenital erythropoietic porphyria. <i>Blood</i> , 2011, 118, 1443-1451.	1.4	80
30	Resonance Raman spectroscopic examination of ferrochelatase-induced porphyrin distortion. <i>Journal of Porphyrins and Phthalocyanines</i> , 2011, 15, 357-363.	0.8	13
31	Ferrochelatase: the convergence of the porphyrin biosynthesis and iron transport pathways. <i>Journal of Porphyrins and Phthalocyanines</i> , 2011, 15, 350-356.	0.8	18
32	Identification and Characterization of an Inhibitory Metal Ion-binding Site in Ferrochelatase. <i>Journal of Biological Chemistry</i> , 2010, 285, 41836-41842.	3.4	13
33	Serine 254 Enhances an Induced Fit Mechanism in Murine 5-Aminolevulinate Synthase. <i>Journal of Biological Chemistry</i> , 2010, 285, 3351-3359.	3.4	11
34	Targeting the Active Site Gate to Yield Hyperactive Variants of 5-Aminolevulinate Synthase. <i>Journal of Biological Chemistry</i> , 2010, 285, 13704-13711.	3.4	27
35	Arg85 and Thr430 in murine 5-aminolevulinate synthase coordinate acyl-CoA binding and contribute to substrate specificity. <i>Protein Science</i> , 2009, 18, 1847-1859.	7.6	12
36	Metal Ion Substrate Inhibition of Ferrochelatase. <i>Journal of Biological Chemistry</i> , 2008, 283, 23685-23691.	3.4	42

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37	Porphyrin Binding and Distortion and Substrate Specificity in the Ferrochelatase Reaction: The Role of Active Site Residues. <i>Journal of Molecular Biology</i> , 2008, 378, 1074-1083.	4.2	62
38	Transient Kinetic Studies Support Refinements to the Chemical and Kinetic Mechanisms of Aminolevulinic Synthase*. <i>Journal of Biological Chemistry</i> , 2007, 282, 23025-23035.	3.4	33
39	Histidine 282 in 5-Aminolevulinic Synthase Affects Substrate Binding and Catalysis. <i>Biochemistry</i> , 2007, 46, 5972-5981.	2.5	14
40	The Conserved Active-Site Loop Residues of Ferrochelatase Induce Porphyrin Conformational Changes Necessary for Catalysis. <i>Biochemistry</i> , 2006, 45, 2904-2912.	2.5	30
41	Modulation of inhibition of ferrochelatase by N-methylprotoporphyrin. <i>Biochemical Journal</i> , 2006, 399, 21-28.	3.7	17
42	Chelataes: distort to select?. <i>Trends in Biochemical Sciences</i> , 2006, 31, 135-142.	7.5	94
43	Mitochondrial iron detoxification is a primary function of frataxin that limits oxidative damage and preserves cell longevity. <i>Human Molecular Genetics</i> , 2006, 15, 467-479.	2.9	179
44	The First Structure from the SOUL/HBP Family of Heme-binding Proteins, Murine P22HBP. <i>Journal of Biological Chemistry</i> , 2006, 281, 31553-31561.	3.4	26
45	The First Structure from the SOUL/HBP Family of Heme-binding Proteins, Murine P22HBP. <i>Journal of Biological Chemistry</i> , 2006, 281, 31553-31561.	3.4	9
46	Porphyrin-substrate binding to murine ferrochelatase: effect on the thermal stability of the enzyme. <i>Biochemical Journal</i> , 2005, 386, 599-605.	3.7	11
47	¹ H, ¹⁵ N and ¹³ C Resonance Assignments of the Heme-binding Protein Murine p22HBP. <i>Journal of Biomolecular NMR</i> , 2005, 32, 338-338.	2.8	5
48	Assembly of Human Frataxin Is a Mechanism for Detoxifying Redox-Active Iron. <i>Biochemistry</i> , 2005, 44, 537-545.	2.5	95
49	Metallation of the Transition-state Inhibitor N-methyl Mesoporphyrin by Ferrochelatase: Implications for the Catalytic Reaction Mechanism. <i>Journal of Molecular Biology</i> , 2005, 352, 1081-1090.	4.2	36
50	Supraphysiological concentrations of 5-aminolevulinic acid dimerize in solution to produce superoxide radical anions via a protonated dihydropyrazine intermediate. <i>Archives of Biochemistry and Biophysics</i> , 2005, 437, 128-137.	3.0	22
51	Conversion of 5-aminolevulinic synthase into a more active enzyme by linking the two subunits: Spectroscopic and kinetic properties. <i>Protein Science</i> , 2005, 14, 1190-1200.	7.6	23
52	Probing the Active Site Loop Motif of Murine Ferrochelatase by Random Mutagenesis. <i>Journal of Biological Chemistry</i> , 2004, 279, 19977-19986.	3.4	20
53	A continuous anaerobic fluorimetric assay for ferrochelatase by monitoring porphyrin disappearance. <i>Analytical Biochemistry</i> , 2003, 318, 18-24.	2.4	13
54	Yeast Frataxin Sequentially Chaperones and Stores Iron by Coupling Protein Assembly with Iron Oxidation. <i>Journal of Biological Chemistry</i> , 2003, 278, 31340-31351.	3.4	145

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55	Circular Permutation of 5-Aminolevulinate Synthase. <i>Journal of Biological Chemistry</i> , 2003, 278, 27945-27955.	3.4	11
56	Hypoxic up-regulation of erythroid 5-aminolevulinate synthase. <i>Blood</i> , 2003, 101, 348-350.	1.4	58
57	Transient State Kinetic Investigation of 5-Aminolevulinate Synthase Reaction Mechanism. <i>Journal of Biological Chemistry</i> , 2002, 277, 44660-44669.	3.4	37
58	Binding of Protoporphyrin IX and Metal Derivatives to the Active Site of Wild-Type Mouse Ferrochelatase at Low Porphyrin-to-Protein Ratios. <i>Biochemistry</i> , 2002, 41, 8253-8262.	2.5	33
59	Unraveling the Substrate-Metal Binding Site of Ferrochelatase: An X-ray Absorption Spectroscopic Study. <i>Biochemistry</i> , 2002, 41, 4809-4818.	2.5	47
60	Circular permutation of 5-aminolevulinate synthase as a tool to evaluate folding, structure and function. <i>Cellular and Molecular Biology</i> , 2002, 48, 11-6.	0.9	1
61	The solution structure and heme binding of the presequence of murine 5-aminolevulinate synthase. <i>FEBS Letters</i> , 2001, 505, 325-331.	2.8	25
62	Substitution of murine ferrochelatase glutamate-287 with glutamine or alanine leads to porphyrin substrate-bound variants. <i>Biochemical Journal</i> , 2001, 356, 217-222.	3.7	18
63	Circular Permutation of 5-Aminolevulinate Synthase. <i>Journal of Biological Chemistry</i> , 2001, 276, 19141-19149.	3.4	26
64	Substitution of murine ferrochelatase glutamate-287 with glutamine or alanine leads to porphyrin substrate-bound variants. <i>Biochemical Journal</i> , 2001, 356, 217.	3.7	14
65	Transcriptional regulation of the murine erythroid-specific 5-aminolevulinate synthase gene. <i>Gene</i> , 2000, 247, 153-166.	2.2	36
66	Porphyrin Interactions with Wild-type and Mutant Mouse Ferrochelatase. <i>Biochemistry</i> , 2000, 39, 2517-2529.	2.5	64
67	5-Aminolevulinate Synthase: Pre-Steady State Reaction and Functional Role of Specific Active Site Residues. , 2000, , 257-263.		0
68	Mutations in the iron-sulfur cluster ligands of the human ferrochelatase lead to erythropoietic protoporphyria. <i>Blood</i> , 2000, 96, 1545-1549.	1.4	1
69	Pre-steady-state Reaction of 5-Aminolevulinate Synthase. <i>Journal of Biological Chemistry</i> , 1999, 274, 12222-12228.	3.4	52
70	Ferrochelatase. <i>International Journal of Biochemistry and Cell Biology</i> , 1999, 31, 995-1000.	2.8	50
71	Lysine-313 of 5-Aminolevulinate Synthase Acts as a General Base during Formation of the Quinonoid Reaction Intermediates. <i>Biochemistry</i> , 1999, 38, 12526-12526.	2.5	7
72	Lysine-313 of 5-Aminolevulinate Synthase Acts as a General Base during Formation of the Quinonoid Reaction Intermediates. <i>Biochemistry</i> , 1999, 38, 3711-3718.	2.5	41

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73	The role of tyrosine 121 in cofactor binding of 5-aminolevulinate synthase. <i>Protein Science</i> , 1998, 7, 1208-1213.	7.6	23
74	Role of Arginine 439 in Substrate Binding of 5-Aminolevulinate Synthase. <i>Biochemistry</i> , 1998, 37, 1478-1484.	2.5	30
75	Aspartate-279 in Aminolevulinate Synthase Affects Enzyme Catalysis through Enhancing the Function of the Pyridoxal 5'-Phosphate Cofactor. <i>Biochemistry</i> , 1998, 37, 3509-3517.	2.5	43
76	Functional Necessity and Physicochemical Characteristics of the [2Fe~2S] Cluster in Mammalian Ferrochelatase. <i>Journal of the American Chemical Society</i> , 1996, 118, 9892-9900.	13.7	44
77	Active Site of 5-Aminolevulinate Synthase Resides at the Subunit Interface. Evidence from <i>In Vivo</i> Heterodimer Formation. <i>Biochemistry</i> , 1996, 35, 8934-8941.	2.5	34
78	Mutations at a Glycine Loop in Aminolevulinate Synthase Affect Pyridoxal Phosphate Cofactor Binding and Catalysis. <i>Biochemistry</i> , 1996, 35, 14109-14117.	2.5	39
79	A Continuous Spectrophotometric Assay for 5-Aminolevulinate Synthase That Utilizes Substrate Cycling. <i>Analytical Biochemistry</i> , 1995, 226, 221-224.	2.4	57
80	Heme biosynthesis: Biochemistry, molecular biology, and relationship to disease. <i>Journal of Bioenergetics and Biomembranes</i> , 1995, 27, 147-150.	2.3	29
81	5-Aminolevulinate synthase and the first step of heme biosynthesis. <i>Journal of Bioenergetics and Biomembranes</i> , 1995, 27, 151-159.	2.3	93
82	Structure and function of ferrochelatase. <i>Journal of Bioenergetics and Biomembranes</i> , 1995, 27, 221-229.	2.3	70
83	Characterization of the Iron-binding Site in Mammalian Ferrochelatase by Kinetic and Mössbauer Methods. <i>Journal of Biological Chemistry</i> , 1995, 270, 26352-26357.	3.4	29
84	Ferrochelatase Binds the Iron-Responsive Element Present in the Erythroid 5-Aminolevulinate Synthase mRNA. <i>Biochemical and Biophysical Research Communications</i> , 1995, 214, 875-878.	2.1	15
85	Aminolevulinate synthase: functionally important residues at a glycine loop, a putative pyridoxal phosphate cofactor-binding site. <i>Biochemistry</i> , 1995, 34, 1678-1685.	2.5	36
86	Aminolevulinate synthase: Lysine 313 is not essential for binding the pyridoxal phosphate cofactor but is essential for catalysis. <i>Protein Science</i> , 1995, 4, 1001-1006.	7.6	28
87	Chromosomal localization of genes required for the terminal steps of oxidative metabolism: ? and ? subunits of ATP synthase and the phosphate carrier. <i>Human Genetics</i> , 1994, 93, 600-2.	3.8	17
88	Heme biosynthesis in mammalian systems: Evidence of a schiff base linkage between the pyridoxal 5'-phosphate cofactor and a lysine residue in 5-aminolevulinate synthase. <i>Protein Science</i> , 1993, 2, 1959-1965.	7.6	72
89	Phosphate transport in mitochondria: Past accomplishments, present problems, and future challenges. <i>Journal of Bioenergetics and Biomembranes</i> , 1993, 25, 483-492.	2.3	35
90	Mouse protoporphyrinogen oxidase. Kinetic parameters and demonstration of inhibition by bilirubin. <i>Biochemical Journal</i> , 1988, 250, 597-603.	3.7	47

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91	Intramembranous particles are clustered on microvillus membrane vesicles. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1985, 816, 131-141.	2.6	7
92	Uncovering host-microbiome interactions in global systems with collaborative programming: a novel approach integrating social and data sciences. <i>F1000Research</i> , 0, 9, 1478.	1.6	0
93	An Extended C-Terminus, the Possible Culprit for Differential Regulation of 5-Aminolevulinate Synthase Isoforms. <i>Frontiers in Molecular Biosciences</i> , 0, 9, .	3.5	2