Mario Rivera

List of Publications by Year
in descending order

53 papers	1,934 citations	218677 26 h-index	254184 43 g-index
55 all docs	55 docs citations	55 times ranked	1315 citing authors

#	Article	IF	Citations
1	Pseudomonas aeruginosa Bacterioferritin Is Assembled from FtnA and BfrB Subunits with the Relative Proportions Dependent on the Environmental Oxygen Availability. Biomolecules, 2022, 12, 366.	4.0	10
2	Small Molecule Inhibitors of the Bacterioferritin (BfrB)â€“Ferredoxin (Bfd) Complex Kill Biofilm-Embedded <i>Pseudomonas aeruginosa</i> Cells. ACS Infectious Diseases, 2021, 7, 123-140.	3.8	16
3	Inhibiting Iron Mobilization from Bacterioferritin in <i>Pseudomonas aeruginosa</i> Impairs Biofilm Formation Irrespective of Environmental Iron Availability. ACS Infectious Diseases, 2020, 6, 447-458.	3.8	24
4	Mobilization of Iron Stored in Bacterioferritin Is Required for Metabolic Homeostasis in Pseudomonas aeruginosa. Pathogens, 2020, 9, 980.	2.8	8
5	Small Molecule Inhibitors of the BfrBâ€“Bfd Interaction DecreasePseudomonas aeruginosaFitness and Potentiate Fluoroquinolone Activity. Journal of the American Chemical Society, 2019, 141, 8171-8184.	13.7	24
6	Bfd, a New Class of [2Fe-2S] Protein That Functions in Bacterial Iron Homeostasis, Requires a Structural Anion Binding Site. Biochemistry, 2018, 57, 5533-5543.	2.5	8
7	4,7-Diaminoisoindoline-1,3-dione. Organic Preparations and Procedures International, 2018, 50, 372-374.	1.3	1
8	Malleilactone Is a Burkholderia pseudomallei Virulence Factor Regulated by Antibiotics and Quorum Sensing. Journal of Bacteriology, 2018, 200, .	2.2	32
9	Bacterioferritin: Structure, Dynamics, and Proteinâ€“Protein Interactions at Play in Iron Storage and Mobilization. Accounts of Chemical Research, 2017, 50, 331-340.	15.6	118
10	Inhibiting the BfrB:Bfd interaction in Pseudomonas aeruginosa causes irreversible iron accumulation in bacterioferritin and iron deficiency in the bacterial cytosol. Metallomics, 2017, 9, 646-659.	2.4	37
11	Structural and mutational analyses of the Leptospira interrogans virulence-related heme oxygenase provide insights into its catalytic mechanism. PLoS ONE, 2017, 12, e0182535.	2.5	5
12	8 The Dual Role of Heme as Cofactor and Substrate in the Biosynthesis of Carbon Monoxide. , 2015, , 241-294.		0
13	Concerted Motions Networking Pores and Distant Ferroxidase Centers Enable Bacterioferritin Function and Iron Traffic. Biochemistry, 2015, 54, 1611-1627.	2.5	18
14	Characterization of the Bacterioferritin/Bacterioferritin Associated Ferredoxin Proteinâ€“Protein Interaction in Solution and Determination of Binding Energy Hot Spots. Biochemistry, 2015, 54, 6162-6175.	2.5	28
15	Local packing modulates diversity of iron pathways and cooperative behavior in eukaryotic and prokaryotic ferritins. Journal of Chemical Physics, 2014, 140, 115104.	3.0	13
16	Heme-iron utilization by Leptospira interrogans requires a heme oxygenase and a plastidic-type ferredoxin-NADP+ reductase. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 3208-3217.	2.4	9
17	Heme Uptake and Metabolism in Bacteria. Metal Ions in Life Sciences, 2013, 12, 279-332.	2.8	42
18	Bacterioferritin: Structure Function and Proteinâ€“Protein Interactions. Handbook of Porphyrin Science, 2013, , 135-178.	0.8	6

#	Article	IF	Citations
19	Protein Dynamics and Ion Traffic in Bacterioferritin. Biochemistry, 2012, 51, 9900-9910.	2.5	27
20	The Structure of the BfrBâ€"Bfd Complex Reveals Proteinâ€"Protein Interactions Enabling Iron Release from Bacterioferritin. Journal of the American Chemical Society, 2012, 134, 13470-13481.	13.7	71
21	Efficient and selective isotopic labeling of hemes to facilitate the study of multiheme proteins. BioTechniques, 2012, 52, 1-7.	1.8	9
22	Two Distinct Ferritin-like Molecules in <i>Pseudomonas aeruginosa</i>: The Product of the <i>bfrA</i> Gene Is a Bacterial Ferritin (FtnA) and Not a Bacterioferritin (Bfr). Biochemistry, 2011, 50, 5236-5248.	2.5	44
23	Structural Studies of Bacterioferritin B from <i>Pseudomonas aeruginosa</i> Suggest a Gating Mechanism for Iron Uptake via the Ferroxidase Center,. Biochemistry, 2010, 49, 1160-1175.	2.5	66
24	Binding of <i>Pseudomonas aeruginosa</i> Apobacterioferritin-Associated Ferredoxin to Bacterioferritin B Promotes Heme Mediation of Electron Delivery and Mobilization of Core Mineral Iron. Biochemistry, 2009, 48, 7420-7431.	2.5	63
25	The dual role of heme as cofactor and substrate in the biosynthesis of carbon monoxide. Metal Ions in Life Sciences, 2009, 6, 241-93.	2.8	3
26	X-ray Crystallographic and Solution State Nuclear Magnetic Resonance Spectroscopic Investigations of NADP+ Binding to Ferredoxin NADP Reductase from Pseudomonas aeruginosa,. Biochemistry, 2008, 47, 8080-8093.	2.5	17
27	The Hydrogen-Bonding Network in Heme Oxygenase Also Functions as a Modulator of Enzyme Dynamics:â€‰ Chaotic Motions upon Disrupting the H-Bond Network in Heme Oxygenase from <i>Pseudomonas </i><i>aeruginosa</i>. Journal of the American Chemical Society, 2007, 129, 11730-11742.	13.7	26
28	Biochemical and Structural Characterization of Pseudomonas aeruginosa Bfd and FPR:â€‰ Ferredoxin NADP+ Reductase and Not Ferredoxin Is the Redox Partner of Heme Oxygenase under Iron-Starvation Conditions,. Biochemistry, 2007, 46, 12198-12211.	2.5	38
29	13C NMR Spectroscopy of Core Heme Carbons as a Simple Tool to Elucidate the Coordination State of Ferric High-Spin Heme Proteins. Inorganic Chemistry, 2006, 45, 8876-8881.	4.0	14
30	Backbone NMR Assignments and H/D Exchange Studies on the Ferric Azide- and Cyanide-Inhibited Forms of Pseudomonas aeruginosa Heme Oxygenase,. Biochemistry, 2006, 45, 4578-4592.	2.5	21
31	Heme oxygenase, steering dioxygen activation toward heme hydroxylation. Journal of Inorganic Biochemistry, 2005, 99, 337-354.	3.5	63
32	The Ferrous Verdohemeâˆ'Heme Oxygenase Complex is Six-Coordinate and Low-Spin. Journal of the American Chemical Society, 2005, 127, 17582-17583.	13.7	20
33	Azide-Inhibited Bacterial Heme Oxygenases Exhibit an S = 3/2 (dxz,dyz)3(dxy)1(dz2)1 Spin State:â€‰ Mechanistic Implications for Heme Oxidation. Journal of the American Chemical Society, 2005, 127, 9794-9807.	13.7	52
34	Heme Oxidation in a Chimeric Protein of the Î±-SelectiveNeisseriae meningitidisHeme Oxygenase with the Distal Helix of the Î´-SelectivePseudomonas aeruginosaâ€. Biochemistry, 2005, 44, 13713-13723.	2.5	19
35	The Heme Oxygenase(s)-Phytochrome System of Pseudomonas aeruginosa. Journal of Biological Chemistry, 2004, 279, 45791-45802.	3.4	85
36	Recent developments in the 13 C NMR spectroscopic analysis of paramagnetic hemes and heme proteins. Analytical and Bioanalytical Chemistry, 2004, 378, 1464-1483.	3.7	47

#	Article	IF	Citations
37	Mixed Regioselectivity in the Arg-177 Mutants ofCorynebacterium diphtheriaeHeme Oxygenase as a Consequence of in-Plane Heme Disorderâ€. Biochemistry, 2004, 43, 5222-5238.	2.5	38
38	Coupled Oxidation vs Heme Oxygenation:Â Insights from Axial Ligand Mutants of Mitochondrial Cytochromeb5. Journal of the American Chemical Society, 2003, 125, 4103-4110.	13.7	59
39	The Hydroxide Complex of Pseudomonas aeruginosa Heme Oxygenase as a Model of the Low-Spin Iron(III) Hydroperoxide Intermediate in Heme Catabolism:â€‰ 13C NMR Spectroscopic Studies Suggest the Active Participation of the Heme in Macrocycle Hydroxylation. Journal of the American Chemical Society, 2003, 125, 11842-11852.	13.7	58
40	Toward Engineering the Stability and Hemin-Binding Properties of Microsomal Cytochromesb5into Rat Outer Mitochondrial Membrane Cytochromeb5:Â Examining the Influence of Residues 25 and 71â€. Biochemistry, 2002, 41, 11566-11581.	2.5	32
41	Models of the Low-Spin Iron(III) Hydroperoxide Intermediate of Heme Oxygenase:Â Magnetic Resonance Evidence for Thermodynamic Stabilization of the dxyElectronic State at Ambient Temperatures. Journal of the American Chemical Society, 2002, 124, 6077-6089.	13.7	84
42	Oxidation of Heme to Î²- and Î´-Biliverdin byPseudomonas aeruginosaHeme Oxygenase as a Consequence of an Unusual Seating of the Heme. Journal of the American Chemical Society, 2002, 124, 14879-14892.	13.7	97
43	Probing the Differences between Rat Liver Outer Mitochondrial Membrane Cytochromeb5and Microsomal Cytochromesb5â€. Biochemistry, 2001, 40, 9469-9483.	2.5	57
44	Hemin Is Kinetically Trapped in Cytochrome b5 from Rat Outer Mitochondrial Membrane. Biochemical and Biophysical Research Communications, 2000, 273, 467-472.	2.1	23
45	Modulation of redox potential in electron transfer proteins: Effects of complex formation on the active site microenvironment of cytochrome b5. Faraday Discussions, 2000, 116, 221-234.	3.2	32
46	Oxygen Activation by Axial Ligand Mutants of Mitochondrial Cytochrome b5:â€‰ Oxidation of Heme to Verdoheme and Biliverdin. Journal of the American Chemical Society, 2000, 122, 7618-7619.	13.7	34
47	An Electrochemical Study of the Factors Responsible for Modulating the Reduction Potential of Putidaredoxin. Journal of Biological Inorganic Chemistry, 1999, 4, 664-674.	2.6	13
48	An1Hâ€“13Câ€“13C-Edited1H NMR Experiment for Making Resonance Assignments in the Active Site of Heme Proteins. Journal of Magnetic Resonance, 1998, 130, 76-81.	2.1	11
49	Conversion of Mitochondrial Cytochromeb5into A Species Capable of Performing the Efficient Coupled Oxidation of Hemeâ€. Biochemistry, 1998, 37, 13082-13090.	2.5	53
50	The Reduction Potential of Cytochromeb5Is Modulated by Its Exposed Heme Edgeâ€. Biochemistry, 1998, 37, 1485-1494.	2.5	83
51	Synthesis of [1,2-13C]- and [2,3-13C]-labeled Î´-aminolevulinic acid. Journal of Labelled Compounds and Radiopharmaceuticals, 1997, 39, 669-675.	1.0	16
52	13C NMR Spectroscopic and X-ray Crystallographic Study of the Role Played by Mitochondrial Cytochromeb5Heme Propionates in the Electrostatic Binding to Cytochromecâ€,â€¡. Biochemistry, 1996, 35, 16378-16390.	2.5	80
53	Gene synthesis, bacterial expression and proton NMR spectroscopic studies of the rat outer mitochondrial membrane cytochrome b5. Biochemistry, 1992, 31, 12233-12240.	2.5	80