Gudrun S Lukat-Rodgers

List of Publications by Year
in descending order

33 papers	1,199 citations	361296 20 h-index	414303 32 g-index
33 all docs	33 docs citations	33 times ranked	1134 citing authors

#	Article	IF	Citations
1	Stepwise Reduction of Dinitrogen Bond Order by a Low-Coordinate Iron Complex. Journal of the American Chemical Society, 2001, 123, 9222-9223.	6.6	227
2	How Active-Site Protonation State Influences the Reactivity and Ligation of the Heme in Chlorite Dismutase. Journal of the American Chemical Society, 2010, 132, 5711-5724.	6.6	84
3	Characterization of Ferrous FixLâ^'Nitric Oxide Adducts by Resonance Raman Spectroscopy. Biochemistry, 1997, 36, 4178-4187.	1.2	76
4	The Cytoplasmic Heme-binding Protein (PhuS) from the Heme Uptake System of Pseudomonas aeruginosa Is an Intracellular Heme-trafficking Protein to the Î´-Regioselective Heme Oxygenase. Journal of Biological Chemistry, 2006, 281, 13652-13662.	1.6	76
5	Structural Basis for Ligand Discrimination and Response Initiation in the Heme-Based Oxygen Sensor FixLâ€. Biochemistry, 1996, 35, 9539-9548.	1.2	66
6	Heme-Based Sensing by the Mammalian Circadian Protein CLOCK. Inorganic Chemistry, 2010, 49, 6349-6365.	1.9	58
7	Structure-Based Mechanism for Oxidative Decarboxylation Reactions Mediated by Amino Acids and Heme Propionates in Coproheme Decarboxylase (HemQ). Journal of the American Chemical Society, 2017, 139, 1900-1911.	6.6	52
8	Unusual Peroxide-Dependent, Heme-Transforming Reaction Catalyzed by HemQ. Biochemistry, 2015, 54, 4022-4032.	1.2	46
9	Alkali Metal Variation and Twisting of the FeNNFe Core in Bridging Diiron Dinitrogen Complexes. Inorganic Chemistry, 2016, 55, 2960-2968.	1.9	45
10	Understanding How the Distal Environment Directs Reactivity in Chlorite Dismutase: Spectroscopy and Reactivity of Arg183 Mutants. Biochemistry, 2012, 51, 1895-1910.	1.2	44
11	Effects of N₂Binding Mode on Iron-Based Functionalization of Dinitrogen to Form an Iron(III) Hydrazido Complex. Journal of the American Chemical Society, 2018, 140, 8586-8598.	6.6	42
12	Novel Heme Ligand Displacement by CO in the Soluble Hemophore HasA and Its Proximal Ligand Mutants:â€‰ Implications for Heme Uptake and Release. Biochemistry, 2008, 47, 2087-2098.	1.2	36
13	Spectroscopic evidence for a 5-coordinate oxygenic ligated high spin ferric heme moiety in the Neisseria meningitidis hemoglobin binding receptor. Biochimica Et Biophysica Acta - General Subjects, 2014, 1840, 3058-3066.	1.1	31
14	A Dimeric Chlorite Dismutase Exhibits O₂-Generating Activity and Acts as a Chlorite Antioxidant in Klebsiella pneumoniae MGH 78578. Biochemistry, 2015, 54, 434-446.	1.2	30
15	Heme Speciation in Alkaline Ferric FixL and Possible Tyrosine Involvement in the Signal Transduction Pathway for Regulation of Nitrogen Fixation. Biochemistry, 1998, 37, 13543-13552.	1.2	29
16	Enhancement of Câ^'H Oxidizing Ability in Coâ€"O₂â€…Complexes through an Isolated Heterobimetallic Oxo Intermediate. Angewandte Chemie - International Edition, 2017, 56, 3211-3215.	7.2	27
17	Decarboxylation involving a ferryl, propionate, and a tyrosyl group in a radical relay yields heme b. Journal of Biological Chemistry, 2018, 293, 3989-3999.	1.6	27
18	Nitrosyl adducts of FixL as probes of heme environment. Journal of Biological Inorganic Chemistry, 2000, 5, 642-654.	1.1	26

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19	Peroxidase-Type Reactions Suggest a Heterolytic/Nucleophilic Oâ€“O Joining Mechanism in the Heme-Dependent Chlorite Dismutase. Biochemistry, 2013, 52, 6982-6994.	1.2	26
20	Mechanisms of Mitochondrial Holocytochrome c Synthase and the Key Roles Played by Cysteines and Histidine of the Heme Attachment Site, Cys-XX-Cys-His. Journal of Biological Chemistry, 2014, 289, 28795-28807.	1.6	22
21	Reactions of Ferrous Coproheme Decarboxylase (HemQ) with O₂ and H₂O₂ Yield Ferric Heme b. Biochemistry, 2017, 56, 189-201.	1.2	21
22	Spectroscopic Observation of a FixL Switching Intermediate. Journal of the American Chemical Society, 1999, 121, 11241-11242.	6.6	20
23	Understanding the roles of strictly conserved tryptophan residues in O₂producing chlorite dismutases. Dalton Transactions, 2013, 42, 3156-3169.	1.6	19
24	Heme Binding by Corynebacterium diphtheriae HmuT: Function and Heme Environment. Biochemistry, 2015, 54, 6598-6609.	1.2	17
25	Spin-state equilibria and axial ligand bonding in FixL hydroxide: a resonance raman study. Journal of Biological Inorganic Chemistry, 1998, 3, 274-281.	1.1	16
26	Characterization of the second conserved domain in the heme uptake protein HtaA from Corynebacterium diphtheriae. Journal of Inorganic Biochemistry, 2017, 167, 124-133.	1.5	11
27	Active Sites of O₂-Evolving Chlorite Dismutases Probed by Halides and Hydroxides and New Ironâ€“Ligand Vibrational Correlations. Biochemistry, 2017, 56, 4509-4524.	1.2	8
28	Distinguishing Active Site Characteristics of Chlorite Dismutases with Their Cyanide Complexes. Biochemistry, 2018, 57, 1501-1516.	1.2	5
29	CO and NO bind to Fe(II) DiGeorge critical region 8 heme but do not restore primary microRNA processing activity. Journal of Biological Inorganic Chemistry, 2016, 21, 1021-1035.	1.1	4
30	Structure and reactivity of chlorite dismutase nitrosyls. Journal of Inorganic Biochemistry, 2020, 211, 111203.	1.5	4
31	Corynebacterium diphtheriae HmuT: dissecting the roles of conserved residues in heme pocket stabilization. Journal of Biological Inorganic Chemistry, 2016, 21, 875-886.	1.1	2
32	Roles of High-Valent Hemes and pH Dependence in Halite Decomposition Catalyzed by Chlorite Dismutase from Dechloromonas aromatica. ACS Catalysis, 2022, 12, 8641-8657.	5.5	2
33	Biophysical Perspectives on the Acquisition, Transport, and Trafficking of Heme in Bacteria. Handbook of Porphyrin Science, 2013, , 249-309.	0.3	0