Giulietta Smulevich

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/8627642/publications.pdf

Version: 2024-02-01

57758 6,123 182 citations papers

44 66 h-index g-index 185 185 185 4064 docs citations times ranked citing authors all docs

102487

#	Article	IF	CITATIONS
1	Heme pocket interactions in cytochrome c peroxidase studied by site-directed mutagenesis and resonance Raman spectroscopy. Biochemistry, 1988, 27, 5477-5485.	2.5	176
2	Conformational change and histidine control of heme chemistry in cytochrome c peroxidase: resonance Raman evidence from Leu-52 and Gly-181 mutants of cytochrome c peroxidase. Biochemistry, 1991, 30, 9546-9558.	2.5	140
3	Spin State and Axial Ligand Bonding in the Hydroxide Complexes of Metmyoglobin, Methemoglobin, and Horseradish Peroxidase at Room and Low Temperatures. Biochemistry, 1994, 33, 4577-4583.	2.5	140
4	Mutation of Distal Residues of Horseradish Peroxidase:  Influence on Substrate Binding and Cavity Properties. Biochemistry, 1997, 36, 1532-1543.	2.5	125
5	Interactions between the Photosystem II Subunit PsbS and Xanthophylls Studied in Vivo and in Vitro. Journal of Biological Chemistry, 2008, 283, 8434-8445.	3.4	125
6	Probing protein structure and dynamics with resonance Raman spectroscopy: cytochrome c peroxidase and hemoglobin. Biochemistry, 1990, 29, 4497-4508.	2.5	123
7	Structure of soybean seed coat peroxidase: A plant peroxidase with unusual stability and haem-apoprotein interactions. Protein Science, 2001, 10, 108-115.	7.6	122
8	Spectroscopic and Interfacial Properties of Myoglobin/Surfactant Complexes. Biophysical Journal, 2004, 87, 1186-1195.	0.5	117
9	Characterization of Recombinant Horseradish Peroxidase C and three Site-Directed mutants, F41V, F41W, and R38K by Resonance Raman Spectroscopy. Biochemistry, 1994, 33, 7398-7407.	2.5	106
10	Extended cardiolipin anchorage to cytochrome c: a model for protein–mitochondrial membrane binding. Journal of Biological Inorganic Chemistry, 2010, 15, 689-700.	2.6	105
11	Ibuprofen Induces an Allosteric Conformational Transition in the Heme Complex of Human Serum Albumin with Significant Effects on Heme Ligation. Journal of the American Chemical Society, 2008, 130, 11677-11688.	13.7	98
12	Fifteen Years of Raman Spectroscopy of Engineered Heme Containing Peroxidases:  What Have We Learned?. Accounts of Chemical Research, 2005, 38, 433-440.	15.6	97
13	Heme to protein linkages in mammalian peroxidases: impact on spectroscopic, redox and catalytic properties. Natural Product Reports, 2007, 24, 571-584.	10.3	95
14	Probing the structure and bifunctionality of catalase-peroxidase (KatG). Journal of Inorganic Biochemistry, 2006, 100, 568-585.	3.5	92
15	Differential Activity and Structure of Highly Similar Peroxidases. Spectroscopic, Crystallographic, and Enzymatic Analyses of Lignifying Arabidopsis thaliana Peroxidase A2 and Horseradish Peroxidase A2,. Biochemistry, 2001, 40, 11013-11021.	2.5	90
16	Alternative carbon monoxide binding modes for horseradish peroxidase studied by resonance Raman spectroscopy. Biochemistry, 1986, 25, 4420-4425.	2.5	84
17	Role of Lysines in Cytochrome <i>c</i> –Cardiolipin Interaction. Biochemistry, 2013, 52, 4578-4588.	2.5	83
18	Fluoride Binding in Hemoproteins: The Importance of the Distal Cavity Structureâ€. Biochemistry, 1997, 36, 8947-8953.	2.5	79

#	Article	IF	CITATIONS
19	The Quantum Mixed-Spin Heme State of Barley Peroxidase:A Paradigm for Class III Peroxidases. Biophysical Journal, 1999, 77, 478-492.	0.5	76
20	Cytochrome c peroxidase mutant active site structures probed by resonance Raman and infrared signatures of the CO adducts. Biochemistry, 1988, 27, 5486-5492.	2.5	72
21	Versatility of Heme Coordination Demonstrated in a Fungal Peroxidase. Absorption and Resonance Raman Studies ofCoprinus cinereusPeroxidase and the Asp245→Asn Mutant at Various pH Valuesâ€. Biochemistry, 1996, 35, 10576-10585.	2.5	72
22	Relationship between heme vinyl conformation and the protein matrix in peroxidases. Journal of Raman Spectroscopy, 2003, 34, 725-736.	2.5	72
23	Spectroscopic Evidence for a Conformational Transition in Horseradish Peroxidase at Very Low pH. Biochemistry, 1997, 36, 640-649.	2.5	70
24	Raman and infrared spectra of cytochrome c peroxidase-carbon monoxide adducts in alternative conformational states. Biochemistry, 1986, 25, 4426-4430.	2.5	68
25	Understanding heme cavity structure of peroxidases: Comparison of electronic absorption and resonance Raman spectra with crystallographic results. Biospectroscopy, 1998, 4, S3-S17.	0.6	67
26	Resonance Raman investigation of ferric iron in horseradish peroxidase and its aromatic donor complexes at room and low temperatures. Biochemistry, 1991, 30, 772-779.	2.5	65
27	Resonance Raman Study of the Active Site of Coprinus cinereus Peroxidase. Biochemistry, 1994, 33, 15425-15432.	2.5	65
28	The Critical Role of the Proximal Calcium Ion in the Structural Properties of Horseradish Peroxidase. Journal of Biological Chemistry, 2001, 276, 40704-40711.	3.4	63
29	Sulfide Binding Properties of Truncated Hemoglobins. Biochemistry, 2010, 49, 2269-2278.	2.5	63
30	Heme-protein interactions in cytochrome c peroxidase revealed by site-directed mutagenesis and resonance Raman spectra of isotopically labeled hemes. Biospectroscopy, 1996, 2, 365-376.	0.6	61
31	Surface-enhanced resonance Raman spectra of adriamycin, 11-deoxycarminomycin, their model chromophores, and their complexes with DNA. The Journal of Physical Chemistry, 1986, 90, 6388-6392.	2.9	60
32	Intramolecular hydrogen bonding and excited state proton transfer in hydroxyanthraquinones as studied by electronic spectra, resonance Raman scattering, and transform analysis. Journal of Chemical Physics, 1998, 108, 534-549.	3.0	54
33	The Reactivity with CO of AHb1 and AHb2 from Arabidopsis thaliana is Controlled by the Distal HisE7 and Internal Hydrophobic Cavities. Journal of the American Chemical Society, 2007, 129, 2880-2889.	13.7	54
34	Effects of temperature and glycerol on the resonance Raman spectra of cytochrome c peroxidase and selected mutants. Biochemistry, 1989, 28, 5058-5064.	2.5	51
35	Electrochemistry of Unfolded Cytochromecin Neutral and Acidic Urea Solutions. Journal of the American Chemical Society, 2005, 127, 7638-7646.	13.7	51
36	Internal Binding of Halogenated Phenols in Dehaloperoxidase-Hemoglobin Inhibits Peroxidase Function. Biophysical Journal, 2010, 99, 1586-1595.	0.5	51

#	Article	IF	CITATIONS
37	The heme iron coordination of unfolded ferric and ferrous cytochrome c in neutral and acidic urea solutions. Spectroscopic and electrochemical studies. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2004, 1703, 31-41.	2.3	49
38	The oxidation process of Antarctic fish hemoglobins. FEBS Journal, 2004, 271, 1651-1659.	0.2	48
39	Single-crystal resonance Raman spectroscopy of site-directed mutants of cytochrome c peroxidase. Biochemistry, 1990, 29, 7174-7180.	2.5	47
40	ATP specifically drives refolding of non-native conformations of cytochrome c. Protein Science, 2005, 14, 1049-1058.	7.6	47
41	Effect of pH on Axial Ligand Coordination of Cytochromec Â  fromMethylophilus methylotrophusand Horse Heart Cytochromecâ€. Biochemistry, 2000, 39, 8234-8242.	2.5	46
42	Rupture of the Hydrogen Bond Linking Two \hat{l} ©-Loops Induces the Molten Globule State at Neutral pH in Cytochrome c. Biochemistry, 2003, 42, 7604-7610.	2.5	46
43	Spectroscopic and Crystallographic Characterization of a Tetrameric Hemoglobin Oxidation Reveals Structural Features of the Functional Intermediate Relaxed/Tense State. Journal of the American Chemical Society, 2008, 130, 10527-10535.	13.7	46
44	The Role of CyaY in Iron Sulfur Cluster Assembly on the E. coli IscU Scaffold Protein. PLoS ONE, 2011, 6, e21992.	2.5	46
45	Fluorescence excitation and emission spectra of 1,8â€dihydroxyanthraquinoneâ€d0 and â€d2 in nâ€octane at 10 K. Journal of Chemical Physics, 1987, 87, 5664-5669.	3.0	45
46	The Distal Cavity Structure of Carbonyl Horseradish Peroxidase As Probed by the Resonance Raman Spectra of His 42 Leu and Arg 38 Leu Mutants. Biochemistry, 1998, 37, 13575-13581.	2.5	45
47	Spectroscopic Characterization of Recombinant Pea Cytosolic Ascorbate Peroxidase: Similarities and Differences with CytochromecPeroxidaseâ€. Biochemistry, 1998, 37, 8080-8087.	2.5	45
48	Resonance Raman and electronic absorption spectra of horseradish peroxidase isozyme A2: evidence for a quantum-mixed spin species. Journal of Raman Spectroscopy, 1998, 29, 933-938.	2.5	44
49	A rapid spectroscopic method to detect the fraudulent treatment of tuna fish with carbon monoxide. Food Chemistry, 2007, 101, 1071-1077.	8.2	43
50	Heme Coordination States of Unfolded Ferrous Cytochrome c. Biophysical Journal, 2006, 91, 3022-3031.	0.5	42
51	The influence of pH and anions on the adsorption mechanism of rifampicin on silver colloids. Journal of Raman Spectroscopy, 2007, 38, 859-864.	2.5	42
52	Benzohydroxamic Acidâ^'Peroxidase Complexes:Â Spectroscopic Characterization of a Novel Heme Spin Species. Journal of the American Chemical Society, 2000, 122, 7368-7376.	13.7	41
53	Resonance Raman spectroscopy of cytochrome c peroxidase single crystals on a variable-temperature microscope stage. Biochemistry, 1990, 29, 2586-2592.	2.5	40
54	Effect of the His175 .fwdarw. Glu Mutation on the Heme Pocket Architecture of Cytochrome c Peroxidase. Biochemistry, 1995, 34, 13485-13490.	2.5	40

#	Article	IF	Citations
55	Unusual Heme Iron-Lipid Acyl Chain Coordination in Escherichia coli Flavohemoglobin. Biophysical Journal, 2004, 86, 3882-3892.	0.5	40
56	Ibuprofen Impairs Allosterically Peroxynitrite Isomerization by Ferric Human Serum Heme-Albumin. Journal of Biological Chemistry, 2009, 284, 31006-31017.	3.4	40
57	The key role played by charge in the interaction of cytochrome c with cardiolipin. Journal of Biological Inorganic Chemistry, 2017, 22, 19-29.	2.6	40
58	New Insights into the Role of Distal Histidine Flexibility in Ligand Stabilization of Dehaloperoxidaseâ°'Hemoglobin from <i>Amphitrite ornata</i> . Biochemistry, 2010, 49, 1903-1912.	2.5	39
59	Small ligand–globin interactions: Reviewing lessons derived from computer simulation. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2013, 1834, 1722-1738.	2.3	37
60	New Insights into the Heme Cavity Structure of Catalase-Peroxidase: A Spectroscopic Approach to the RecombinantSynechocystisEnzyme and Selected Distal Cavity Mutantsâ€. Biochemistry, 2002, 41, 9237-9247.	2.5	36
61	Reactivity of Inorganic Sulfide Species toward a Heme Protein Model. Inorganic Chemistry, 2015, 54, 527-533.	4.0	36
62	Hydrogen peroxideâ€mediated conversion of coproheme to heme <i>b</i> by HemQâ€"lessons from the first crystal structure and kinetic studies. FEBS Journal, 2016, 283, 4386-4401.	4.7	36
63	Raman excitation profiles and secondâ€derivative absorption spectra of βâ€carotene. Journal of Chemical Physics, 1989, 91, 85-91.	3.0	35
64	Characterization of soybean seed coat peroxidase: Resonance Raman evidence for a structure-based classification of plant peroxidases., 1998, 4, 355-364.		35
65	Role of the Main Access Channel of Catalase-Peroxidase in Catalysis. Journal of Biological Chemistry, 2005, 280, 42411-42422.	3.4	34
66	Resonance raman spectra and the active site structure of semisynthetic Met80Cys horse heart cytochrome c. Inorganic Chemistry, 1994, 33, 4629-4634.	4.0	33
67	Anion concentration modulates the conformation and stability of the molten globule of cytochrome c. Journal of Biological Inorganic Chemistry, 2003, 8, 663-670.	2.6	31
68	Comparison between Catalase-Peroxidase and Cytochrome c Peroxidase. The Role of the Hydrogen-Bond Networks for Protein Stability and Catalysis. Biochemistry, 2004, 43, 5792-5802.	2.5	31
69	Structure–function relationships in human cytochrome c: The role of tyrosine 67. Journal of Inorganic Biochemistry, 2016, 155, 56-66.	3.5	31
70	Resonance Raman assignment of myeloperoxidase and the selected mutants Asp94Val and Met243Thr. Effect of the heme distortion. Journal of Raman Spectroscopy, 2006, 37, 263-276.	2.5	30
71	Purification and characterization of a new cationic peroxidase from fresh flowers of Cynara scolymus L Journal of Inorganic Biochemistry, 2003, 94, 243-254.	3.5	29
72	Fluoride as a Probe for H-Bonding Interactions in the Active Site of Heme Proteins: The Case of <i>Thermobifida fusca</i> Hemoglobin. Journal of the American Chemical Society, 2011, 133, 20970-20980.	13.7	29

#	Article	IF	Citations
73	Unravelling the Non-Native Low-Spin State of the Cytochrome <i>>c⟨ i>â€"Cardiolipin Complex: Evidence of the Formation of a His-Ligated Species Only. Biochemistry, 2017, 56, 1887-1898.</i>	2.5	29
74	A Novel Heme Protein, the Cu,Zn-Superoxide Dismutase from Haemophilus ducreyi. Journal of Biological Chemistry, 2001, 276, 30326-30334.	3.4	28
75	Structure and function of the Gondwanian hemoglobin of Pseudaphritis urvillii, a primitive notothenioid fish of temperate latitudes. Protein Science, 2009, 13, 2766-2781.	7.6	28
76	Insights into the Active Site of Coproheme Decarboxylase from Listeria monocytogenes. Biochemistry, 2018, 57, 2044-2057.	2.5	28
77	Redox Cofactor Rotates during Its Stepwise Decarboxylation: Molecular Mechanism of Conversion of Coproheme to Heme <i>b</i>). ACS Catalysis, 2019, 9, 6766-6782.	11.2	28
78	Biophysical Characterisation of Neuroglobin of the Icefish, a Natural Knockout for Hemoglobin and Myoglobin. Comparison with Human Neuroglobin. PLoS ONE, 2012, 7, e44508.	2.5	28
79	A model for the misfolded bis-His intermediate of cytochrome c: the 1–56 N-fragment. Journal of Inorganic Biochemistry, 2004, 98, 1067-1077.	3.5	27
80	The effects of ATP and sodium chloride on the cytochrome câ€"cardiolipin interaction: The contrasting behavior of the horse heart and yeast proteins. Journal of Inorganic Biochemistry, 2011, 105, 1365-1372.	3.5	27
81	The Greenland shark Somniosus microcephalusâ€"Hemoglobins and ligand-binding properties. PLoS ONE, 2017, 12, e0186181.	2.5	27
82	Unusually Strong H-Bonding to the Heme Ligand and Fast Geminate Recombination Dynamics of the Carbon Monoxide Complex of Bacillus subtilis Truncated Hemoglobin. Biochemistry, 2008, 47, 902-910.	2.5	26
83	Eukaryotic extracellular catalase–peroxidase from Magnaporthe grisea – Biophysical/chemical characterization of the first representative from a novel phytopathogenic KatG group. Biochimie, 2012, 94, 673-683.	2.6	26
84	Anatomy of an iron-sulfur cluster scaffold protein: Understanding the determinants of [2Fe–2S] cluster stability on IscU. Biochimica Et Biophysica Acta - Molecular Cell Research, 2015, 1853, 1448-1456.	4.1	26
85	Molecular Mechanism of Enzymatic Chlorite Detoxification: Insights from Structural and Kinetic Studies. ACS Catalysis, 2017, 7, 7962-7976.	11.2	26
86	Surface Enhanced Raman Spectroscopy for In-Field Detection of Pesticides: A Test on Dimethoate Residues in Water and on Olive Leaves. Molecules, 2019, 24, 292.	3.8	26
87	Heme Pocket Structural Properties of a Bacterial Truncated Hemoglobin from <i>Thermobifida fusca</i> . Biochemistry, 2010, 49, 10394-10402.	2.5	25
88	Structural flexibility of the heme cavity in the coldâ€adapted truncated hemoglobin from the Antarctic marine bacterium <i>PseudoalteromonasÂhaloplanktis </i> <scp>TAC</scp> 125. FEBS Journal, 2015, 282, 2948-2965.	4.7	24
89	Resonance Raman Studies of the Heme Active Site of the Homodimeric Myoglobin from Nassa mutabilis: A Peculiar Case. Biochemistry, 1995, 34, 7507-7516.	2.5	23
90	Mutation of the distal arginine in Coprinus cinereus peroxidase . Structural implications. FEBS Journal, 1998, 251, 830-838.	0.2	23

#	Article	IF	CITATIONS
91	Cationic Ascorbate Peroxidase Isoenzyme II from Tea: Structural Insights into the Heme Pocket of a Unique Hybrid Peroxidaseâ€. Biochemistry, 2001, 40, 10360-10370.	2.5	23
92	The optical spectra of fluoride complexes can effectively probe H-bonding interactions in the distal cavity of heme proteins. Journal of Inorganic Biochemistry, 2011, 105, 1338-1343.	3.5	23
93	Raman excitation profiles of 1,8-dihydroxyanthraquinone at 8 K. Chemical Physics, 1986, 105, 159-171.	1.9	22
94	Effect of low temperature on soybean peroxidase: spectroscopic characterization of the quantum-mechanically admixed spin state. Journal of Inorganic Biochemistry, 2000, 79, 269-274.	3.5	22
95	New Insight into the Peroxidaseaˆ 'Hydroxamic Acid Interaction Revealed by the Combination of Spectroscopic and Crystallographic Studies. Biochemistry, 2003, 42, 14066-14074.	2.5	22
96	Nitrite Dismutase Reaction Mechanism: Kinetic and Spectroscopic Investigation of the Interaction between Nitrophorin and Nitrite. Journal of the American Chemical Society, 2015, 137, 4141-4150.	13.7	22
97	From chlorite dismutase towards HemQ–the role of the proximal H-bonding network in haeme binding. Bioscience Reports, 2016, 36, .	2.4	22
98	Photodissociable endogenous ligand in alkaline-reduced cytochrome c peroxidase implicates distal protein tension. Biochemistry, 1989, 28, 9905-9908.	2.5	21
99	Combined crystallographic and spectroscopic analysis of <i>Trematomus bernacchii</i> hemoglobin highlights analogies and differences in the peculiar oxidation pathway of Antarctic fish hemoglobins. Biopolymers, 2009, 91, 1117-1125.	2.4	21
100	The peculiar heme pocket of the 2/2 hemoglobin of cold-adapted Pseudoalteromonas haloplanktis TAC125. Journal of Biological Inorganic Chemistry, 2011, 16, 299-311.	2.6	21
101	H-bonding networks of the distal residues and water molecules in the active site of Thermobifida fusca hemoglobin. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2013, 1834, 1901-1909.	2.3	21
102	Carbon monoxide dissociation in cytochrome c peroxidase: site-directed mutagenesis shows that distal Arg 48 influences carbon monoxide dissociation rates. Biochemistry, 1990, 29, 9978-9988.	2.5	20
103	pH Dependence of Structural and Functional Properties of Oxidized Cytochrome c" from Methylophilus methylotrophus. Journal of Biological Chemistry, 1997, 272, 24800-24804.	3.4	20
104	Structural Plasticity and Functional Implications of Internal Cavities in Distal Mutants of Type 1 Non-Symbiotic Hemoglobin AHb1 fromArabidopsis thaliana. Journal of Physical Chemistry B, 2009, 113, 16028-16038.	2.6	20
105	Histidine E7 Dynamics Modulates Ligand Exchange between Distal Pocket and Solvent in AHb1 from <i>Arabidopsis thaliana</i> Journal of Physical Chemistry B, 2011, 115, 4138-4146.	2.6	20
106	The Met80Ala and Tyr67His/Met80Ala mutants of human cytochrome c shed light on the reciprocal role of Met80 and Tyr67 in regulating ligand access into the heme pocket. Journal of Inorganic Biochemistry, 2017, 169, 86-96.	3.5	20
107	Insights into the role of the histidines in the structure and stability of cytochrome c. Journal of Biological Inorganic Chemistry, 2006, 11, 52-62.	2.6	19
108	Probing the nonâ€native states of Cytochrome c with resonance Raman spectroscopy: A tool for investigating the structure–function relationship. Journal of Raman Spectroscopy, 2018, 49, 1041-1055.	2.5	19

#	Article	IF	CITATIONS
109	The hydrogen bonding network of coproheme in coproheme decarboxylase from Listeria monocytogenes: Effect on structure and catalysis. Journal of Inorganic Biochemistry, 2019, 195, 61-70.	3.5	19
110	Role of the Distal Phenylalanine 54 on the Structure, Stability, and Ligand Binding ofCoprinus cinereusPeroxidaseâ€. Biochemistry, 1999, 38, 7819-7827.	2.5	18
111	Multiphasic Kinetics of Myoglobin/Sodium Dodecyl Sulfate Complex Formation. Biophysical Journal, 2007, 92, 4078-4087.	0.5	18
112	Effect of sol–gel encapsulation on the unfolding of ferric horse heart cytochrome c. Journal of Biological Inorganic Chemistry, 2005, 10, 696-703.	2.6	17
113	The role of the sulfonium linkage in the stabilization of the ferrous form of myeloperoxidase: A comparison with lactoperoxidase. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2008, 1784, 843-849.	2.3	17
114	Degradation of sulfide by dehaloperoxidase-hemoglobin from Amphitrite ornata. Journal of Biological Inorganic Chemistry, 2011, 16, 611-619.	2.6	17
115	Mycobacterial and Human Nitrobindins: Structure and Function. Antioxidants and Redox Signaling, 2020, 33, 229-246.	5.4	17
116	Haem-linked interactions in horseradish peroxidase revealed by spectroscopic analysis of the Phe-221â†'Met mutant. Biochemical Journal, 2001, 353, 181-191.	3.7	16
117	The 40s ?-loop plays a critical role in the stability and the alkaline conformational transition of cytochrome c. Journal of Biological Inorganic Chemistry, 2004, 9, 997-1006.	2.6	16
118	Manipulating the covalent link between distal side tryptophan, tyrosine, and methionine in catalase-peroxidases: An electronic absorption and resonance Raman study. Biopolymers, 2004, 74, 46-50.	2.4	16
119	Nanohybrid Assemblies of Porphyrin and Au10 Cluster Nanoparticles. Nanomaterials, 2019, 9, 1026.	4.1	16
120	Inclusion Complex Formation of 1,8-Dihydroxyanthraquinone with Cyclodextrins in Aqueous Solution and in Solid State. Journal of Pharmaceutical Sciences, 1988, 77, 523-526.	3.3	15
121	Ligand―and protonâ€linked conformational changes of the ferrous 2/2 hemoglobin of <i>Pseudoalteromonas haloplanktis</i> TAC125. IUBMB Life, 2011, 63, 566-573.	3.4	15
122	Reciprocal Allosteric Modulation of Carbon Monoxide and Warfarin Binding to Ferrous Human Serum Heme-Albumin. PLoS ONE, 2013, 8, e58842.	2.5	15
123	Interplay of the H-Bond Donor–Acceptor Role of the Distal Residues in Hydroxyl Ligand Stabilization of <i>Thermobifida fusca</i> Truncated Hemoglobin. Biochemistry, 2014, 53, 8021-8030.	2.5	15
124	Spectroscopic characterization of mutations at the Phe41 position in the distal haem pocket of horseradish peroxidase C: structural and functional consequences. Biochemical Journal, 2002, 363, 571-579.	3.7	14
125	Effects of urea and acetic acid on the heme axial ligation structure of ferric myoglobin at very acidic pH. Archives of Biochemistry and Biophysics, 2009, 489, 68-75.	3.0	14
126	Occurrence and formation of endogenous histidine hexaâ€coordination in coldâ€adapted hemoglobins. IUBMB Life, 2011, 63, 295-303.	3.4	14

#	Article	IF	CITATIONS
127	Surface-enhanced Raman scattering of glyphosate on dispersed silver nanoparticles: A reinterpretation based on model molecules. Vibrational Spectroscopy, 2020, 108, 103061.	2.2	14
128	Surface-Enhanced Raman Spectroscopy for Bisphenols Detection: Toward a Better Understanding of the Analyte–Nanosystem Interactions. Nanomaterials, 2021, 11, 881.	4.1	14
129	Spectroscopic and kinetic properties of the horseradish peroxidase mutant T171S. Evidence for selective effects on the reduced state of the enzyme. FEBS Journal, 2005, 272, 5514-5521.	4.7	13
130	High throughput headspace GCâ€MS quantitative method to measure the amount of carbon monoxide in treated tuna fish. Journal of Mass Spectrometry, 2010, 45, 1041-1045.	1.6	13
131	Evidence for pH-dependent multiple conformers in iron(II) heme–human serum albumin: spectroscopic and kinetic investigation of carbon monoxide binding. Journal of Biological Inorganic Chemistry, 2012, 17, 133-147.	2.6	13
132	Functional and Spectroscopic Characterization of Chlamydomonas reinhardtii Truncated Hemoglobins. PLoS ONE, 2015, 10, e0125005.	2.5	13
133	Lack of orientation selectivity of the heme insertion in murine neuroglobin revealed by resonance Raman spectroscopy. FEBS Journal, 2020, 287, 4082-4097.	4.7	13
134	Substrate specificity and complex stability of coproporphyrin ferrochelatase is governed by hydrogenâ€bonding interactions of the four propionate groups. FEBS Journal, 2022, 289, 1680-1699.	4.7	13
135	Surface-enhanced resonance Raman spectroscopy of rifamycins on silver nanoparticles: insight into their adsorption mechanisms. Journal of Raman Spectroscopy, 2006, 37, 900-909.	2.5	12
136	ATP regulation of the ligand-binding properties in temperate and cold-adapted haemoglobins. X-ray structure and ligand-binding kinetics in the sub-Antarctic fish Eleginops maclovinus. Molecular BioSystems, 2012, 8, 3295.	2.9	12
137	Insights into the anomalous heme pocket of rainbow trout myoglobin. Journal of Inorganic Biochemistry, 2012, 109, 1-8.	3.5	12
138	Addition of sodium ascorbate to extend the shelf-life of tuna meat fish: A risk or a benefit for consumers?. Journal of Inorganic Biochemistry, 2019, 200, 110813.	3.5	12
139	Reaction intermediate rotation during the decarboxylation of coproheme to heme b in C.Âdiphtheriae. Biophysical Journal, 2021, 120, 3600-3614.	0.5	12
140	A Comparative Study on Axial Coordination and Ligand Binding in Ferric Mini Myoglobin and Horse Heart Myoglobin. Biophysical Journal, 2007, 93, 2135-2142.	0.5	11
141	Coexistence of multiple globin genes conferring protection against nitrosative stress to the Antarctic bacterium Pseudoalteromonas haloplanktis TAC125. Nitric Oxide - Biology and Chemistry, 2018, 73, 39-51.	2.7	11
142	Surface Engineering of Gold Nanorods for Cytochrome <i>c</i> Bioconjugation: An Effective Strategy To Preserve the Protein Structure. ACS Omega, 2018, 3, 4959-4967.	3.5	11
143	Mutation of residues critical for benzohydroxamic acid binding to horseradish peroxidase isoenzyme C. Biopolymers, 2001, 62, 261-267.	2.4	10
144	Development and validation of a quantitative spectrophotometric method to detect the amount of carbon monoxide in treated tuna fish. Food Chemistry, 2011, 128, 1143-1151.	8.2	10

#	Article	IF	CITATIONS
145	Proximal and distal control for ligand binding in neuroglobin: role of the CD loop and evidence for His64 gating. Scientific Reports, 2019, 9, 5326.	3.3	10
146	Mycobacterial and Human Ferrous Nitrobindins: Spectroscopic and Reactivity Properties. International Journal of Molecular Sciences, 2021, 22, 1674.	4.1	10
147	Understanding heme cavity structure of peroxidases: Comparison of electronic absorption and resonance Raman spectra with crystallographic results. Biospectroscopy, 1998, 4, S3-S17.	0.6	10
148	Transient resonance Raman spectroscopy shows unrelaxed heme following CO photodissociation from cytochrome-c peroxidase. BBA - Proteins and Proteomics, 1986, 873, 88-91.	2.1	9
149	Alteration of the proximal bond energy in the unliganded form of the homodimeric myoglobin fromNassa mutabilisKinetic and spectroscopic evidence. FEBS Letters, 1992, 296, 184-186.	2.8	9
150	Cooperative Mechanism in the Homodimeric Myoglobin fromNassamutabilisâ€. Biochemistry, 1998, 37, 2873-2878.	2.5	9
151	Resonance Raman spectra and transform analysis of anthracyclines and their complexes with DNA. Journal of Raman Spectroscopy, 2001, 32, 565-578.	2.5	9
152	Crystallization, preliminary X-ray diffraction studies and Raman microscopy of the major haemoglobin from the sub-Antarctic fish <i>Eleginops maclovinus</i> io the carbomonoxy form. Acta Crystallographica Section F: Structural Biology Communications, 2010, 66, 1536-1540.	0.7	9
153	An active site at work – the role of key residues in C. diphteriae coproheme decarboxylase. Journal of Inorganic Biochemistry, 2022, 229, 111718.	3.5	9
154	Spectroscopic characterization of mutations at the Phe41 position in the distal haem pocket of horseradish peroxidase C: structural and functional consequences. Biochemical Journal, 2002, 363, 571.	3.7	8
155	Fine-Tuning of the Binding and Dissociation of CO by the Amino Acids of the Heme Pocket of Coprinus cinereus Peroxidase. Biochemistry, 2002, 41, 13264-13273.	2.5	8
156	SERS detection of benzophenones on viologen functionalized Ag nanoparticles: application to breakfast cereals. Journal of Raman Spectroscopy, 2013, 44, 1428-1434.	2.5	8
157	Oxygen-Linked S-Nitrosation in Fish Myoglobins: A Cysteine-Specific Tertiary Allosteric Effect. PLoS ONE, 2014, 9, e97012.	2.5	8
158	A Plant Gene Encoding One-Heme and Two-Heme Hemoglobins With Extreme Reactivities Toward Diatomic Gases and Nitrite. Frontiers in Plant Science, 2020, 11, 600336.	3.6	8
159	Raman excitation profiles of actinomycin D. Nucleic Acids and Protein Synthesis, 1980, 610, 384-391.	1.7	7
160	Secondâ€derivative UV spectra of polyacetylene chromophores: Fingerprints of their geometrical isomers. Chemische Berichte, 1986, 119, 2843-2847.	0.2	7
161	Anion- and pH-linked conformational transition in horseradish peroxidase. Journal of Inorganic Biochemistry, 2000, 79, 25-30.	3.5	7
162	Haem-linked interactions in horseradish peroxidase revealed by spectroscopic analysis of the Phe-221â†'Met mutant. Biochemical Journal, 2001, 353, 181.	3.7	6

#	Article	IF	CITATIONS
163	The quantum mechanically mixed-spin state in a non-symbiotic plant hemoglobin: The effect of distal mutation on AHb1 from Arabidopsis thaliana. Journal of Inorganic Biochemistry, 2007, 101, 1812-1819.	3.5	6
164	Conformational Flexibility Drives Cold Adaptation in Pseudoalteromonas haloplanktis TAC125 Globins. Antioxidants and Redox Signaling, 2020, 32, 396-411.	5.4	6
165	Structural and Functional Properties of Heme-containing Peroxidases: a Resonance Raman Perspective for the Superfamily of Plant, Fungal and Bacterial Peroxidases. 2-Oxoglutarate-Dependent Oxygenases, 2015, , 61-98.	0.8	6
166	Infrared Absorption and Calorimetric Evidence for the Existence of Two Forms of 1.8 Dihydroxyanthraquinone. Molecular Crystals and Liquid Crystals, 1987, 142, 173-179.	0.8	5
167	Structural determinants of ligand binding in truncated hemoglobins: Resonance Raman spectroscopy of the native states and their carbon monoxide and hydroxide complexes. Biopolymers, 2018, 109, e23114.	2.4	5
168	Solution and crystal phase resonance Raman spectroscopy: Valuable tools to unveil the structure and function of heme proteins. Journal of Porphyrins and Phthalocyanines, 2019, 23, 691-700.	0.8	5
169	Bridging Theory and Experiment to Address Structural Properties of Truncated Haemoglobins. Advances in Microbial Physiology, 2015, 67, 85-126.	2.4	4
170	Detecting rotational disorder in heme proteins: A comparison between resonance Raman spectroscopy, nuclear magnetic resonance, and circular dichroism. Journal of Raman Spectroscopy, 2021, 52, 2536-2549.	2.5	4
171	Spectroscopic evidence of the effect of hydrogen peroxide excess on the coproheme decarboxylase from actinobacterial <scp> <i>Corynebacterium diphtheriae</i> </scp> . Journal of Raman Spectroscopy, 0, , .	2.5	4
172	A spectrophotometric method for the detection of carboxymyoglobin in beef drip. International Journal of Food Science and Technology, 2013, 48, 429-436.	2.7	3
173	Probing the Role of Murine Neuroglobin CDloop–D-Helix Unit in CO Ligand Binding and Structural Dynamics. ACS Chemical Biology, 0, , .	3.4	2
174	Variable-Temperature Stage for Raman Microprobing Spectroscopy. Applied Spectroscopy, 1992, 46, 1309-1311.	2.2	1
175	Fluoride Binding in Hemoproteins:Â The Importance of the Distal Cavity Structure. Biochemistry, 1998, 37, 8268-8268.	2.5	1
176	Effect on the Heme Cavity of Coprinus Cinereus Peroxidase (CEP) Upon Mutation of Distal Residues. , 1997, , 167-168.		1
177	Calcium depletion of horseradish peroxidase generates a quantum mechanical mixed-spin heme state. , 1999, , 145-146.		1
178	Fifteen Years of Raman Spectroscopy of Engineered Heme Containing Peroxidases: What Have We Learned?. ChemInform, 2005, 36, no.	0.0	0
179	High Protein Structural Flexibility Of A Truncated Hemoglobin From An Antarctic Cold-Adapted Bacterium. , 2010, , .		0
180	Ibuprofen impairs allosterically peroxynitrite isomerization by ferric human serum heme-albumin Journal of Biological Chemistry, 2011, 286, 29441.	3.4	0

#	Article	IF	CITATIONS
181	Electronic Absorption and Resonance Raman Spectroscopies to Investigate Heme Proteins. , 1997, , 83-84.		O
182	Role of the distal phenylalanine 41 on the properties of horseradish peroxidase C., 1999, , 149-150.		0