Koichiro Ishimori

List of Publications by Year in Descending Order

162 papers	4,469 citations	38 h-index	60 g-index
185 ext. papers	4,822 ext. citations	5.4 avg, IF	4.96 L-index

#	Paper	IF	Citations
162	Regulation of the expression of the nickel uptake system in Vibrio cholerae by iron and heme via ferric uptake regulator (Fur).. *Journal of Inorganic Biochemistry*, **2022**, 228, 111713	4.2	0
161	Radical transfer but not heme distal residues is essential for pH dependence of dye-decolorizing activity of peroxidase from Vibrio cholerae. *Journal of Inorganic Biochemistry*, **2021**, 219, 111422	4.2	1
160	Conformational ensemble of a multidomain protein explored by Gd electron paramagnetic resonance. *Biophysical Journal*, **2021**, 120, 2943-2951	2.9	
159	C9orf72-derived arginine-rich poly-dipeptides impede phase modifiers. *Nature Communications*, **2021**, 12, 5301	17.4	2
158	Functional cooperativity between the trigger factor chaperone and the ClpXP proteolytic complex. *Nature Communications*, **2021**, 12, 281	17.4	6
157	Mechanistic insights into heme-mediated transcriptional regulation via a bacterial manganese-binding iron regulator, iron response regulator (Irr). *Journal of Biological Chemistry*, **2020**, 295, 11316-11325	5.4	4
156	Integrated bio-metal science: New frontiers of bio-metal science opened with cutting-edge techniques. *Biophysics and Physicobiology*, **2020**, 17, 94-97	1.4	
155	Volume Profile of Protein Determined by Pressure Effects. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **2020**, 30, 4-11	0	
154	Osmotic pressure effects identify dehydration upon cytochrome c-cytochrome c oxidase complex formation contributing to a specific electron pathway formation. *Biochemical Journal*, **2020**, 477, 1565-1578	3.8	2
153	A single mutation converts Alr5027 from cyanobacteria Nostoc sp. PCC 7120 to a heme-binding protein with heme-degrading ability. *Journal of Inorganic Biochemistry*, **2020**, 203, 110916	4.2	
152	Biophysical research in Hokkaido University, Japan. *Biophysical Reviews*, **2020**, 12, 233-236	3.7	0
151	Spectroscopic Characterization of Halorhodopsin Reconstituted into Nanodisks Using Native Lipids. *Biophysical Journal*, **2020**, 118, 2853-2865	2.9	
150	Accelerating structural life science by paramagnetic lanthanide probe methods. *Biochimica Et Biophysica Acta - General Subjects*, **2020**, 1864, 129332	4	12
149	Specific heme binding to heme regulatory motifs in iron regulatory proteins and its functional significance. *Journal of Inorganic Biochemistry*, **2019**, 198, 110726	4.2	6
148	Subunit-subunit interactions play a key role in the heme-degradation reaction of HutZ from Vibrio cholerae. *Dalton Transactions*, **2019**, 48, 3973-3983	4.3	6
147	Role of His63 in HutZ from Vibrio cholerae in the heme degradation reaction and heme binding. *Dalton Transactions*, **2019**, 48, 5408-5416	4.3	2
146	Quantitative description and classification of protein structures by a novel robust amino acid network: interaction selective network (ISN). *Scientific Reports*, **2019**, 9,	4.9	3

145	Uncovering dehydration in cytochrome refolding from urea- and guanidine hydrochloride-denatured unfolded state by high pressure spectroscopy. *Biophysics and Physicobiology*, **2019**, 16, 18-27	1.4	3
144	Structural Basis for Protein Folding and Holding Mediated by Molecular Chaperones. *Seibutsu Butsuri*, **2019**, 59, 197-201	0	
143	Role of conserved arginine in the heme distal site of HutZ from Vibrio cholerae in the heme degradation reaction. *Archives of Biochemistry and Biophysics*, **2019**, 677, 108165	4.1	1
142	Structural basis for the heme transfer reaction in heme uptake machinery from Corynebacteria. *Chemical Communications*, **2019**, 55, 13864-13867	5.8	2
141	Redox-dependent axial ligand replacement and its functional significance in heme-bound iron regulatory proteins. *Journal of Inorganic Biochemistry*, **2018**, 182, 238-248	4.2	6
140	Heme Binding to Porphobilinogen Deaminase from Vibrio cholerae Decelerates the Formation of 1-Hydroxymethylbilane. *ACS Chemical Biology*, **2018**, 13, 750-760	4.9	14
139	Polyethylene glycol promotes autoxidation of cytochrome c. *Biochimica Et Biophysica Acta - General Subjects*, **2018**, 1862, 1339-1349	4	2
138	Structural insight into proline / isomerization of unfolded proteins catalyzed by the trigger factor chaperone. *Journal of Biological Chemistry*, **2018**, 293, 15095-15106	5.4	11
137	Oligomerization of a molecular chaperone modulates its activity. *ELife*, **2018**, 7,	8.9	32
136	Dual role of the active-center cysteine in human peroxiredoxin 1: Peroxidase activity and heme binding. *Biochemical and Biophysical Research Communications*, **2017**, 483, 930-935	3.4	7
135	HmuS from Yersinia pseudotuberculosis is a non-canonical heme-degrading enzyme to acquire iron from heme. *Biochimica Et Biophysica Acta - General Subjects*, **2017**, 1861, 1870-1878	4	6
134	The Iron Chaperone Protein CyaY from Vibrio cholerae Is a Heme-Binding Protein. *Biochemistry*, **2017**, 56, 2425-2434	3.2	7
133	Iron chelators inhibit the heme-degradation reaction by HutZ from Vibrio cholerae. *Dalton Transactions*, **2017**, 46, 5147-5150	4.3	7
132	Heme Proximal Hydrogen Bonding between His170 and Asp132 Plays an Essential Role in the Heme Degradation Reaction of HutZ from Vibrio cholerae. *Biochemistry*, **2017**, 56, 2723-2734	3.2	10
131	Energetic basis on interactions between ferredoxin and ferredoxin NADP reductase at varying physiological conditions. *Biochemical and Biophysical Research Communications*, **2017**, 482, 909-915	3.4	5
130	Reaction intermediates in the heme degradation reaction by HutZ from Vibrio cholerae. *Dalton Transactions*, **2017**, 46, 8104-8109	4.3	11
129	Heme Iron Coordination Structure of Heme Transport Protein HutB fromVibrio Cholerae. *Bulletin of the Chemical Society of Japan*, **2017**, 90, 924-930	5.1	2
128	Haem-dependent dimerization of PGRMC1/Sigma-2 receptor facilitates cancer proliferation and chemoresistance. *Nature Communications*, **2016**, 7, 11030	17.4	112

127	Amorphous Aggregation of Cytochrome c with Inherently Low Amyloidogenicity Is Characterized by the Metastability of Supersaturation and the Phase Diagram. *Langmuir*, **2016**, 32, 2010-22	4	17
126	Investigation of the redox-dependent modulation of structure and dynamics in human cytochrome c. *Biochemical and Biophysical Research Communications*, **2016**, 469, 978-84	3.4	20
125	Cytoplasmic Heme-Binding Protein (HutX) from Vibrio cholerae Is an Intracellular Heme Transport Protein for the Heme-Degrading Enzyme, HutZ. *Biochemistry*, **2016**, 55, 884-93	3.2	18
124	Conformational Disorder of the Most Immature Cu, Zn-Superoxide Dismutase Leading to Amyotrophic Lateral Sclerosis. *Journal of Biological Chemistry*, **2016**, 291, 4144-55	5.4	25
123	Structural Characterization of Heme Environmental Mutants of CgHmuT that Shuttles Heme Molecules to Heme Transporters. *International Journal of Molecular Sciences*, **2016**, 17,	6.3	7
122	Protein oxidation mediated by heme-induced active site conversion specific for heme-regulated transcription factor, iron response regulator. *Scientific Reports*, **2016**, 6, 18703	4.9	17
121	Energetic Mechanism of Cytochrome c-Cytochrome c Oxidase Electron Transfer Complex Formation under Turnover Conditions Revealed by Mutational Effects and Docking Simulation. *Journal of Biological Chemistry*, **2016**, 291, 15320-31	5.4	12
120	Redox-Dependent Dynamics in Heme-Bound Bacterial Iron Response Regulator (Irr) Protein. *Biochemistry*, **2016**, 55, 4047-54	3.2	10
119	Oscillatory growth for twisting crystals. *Chemical Communications*, **2015**, 51, 8516-9	5.8	9
118	A Dye-Decolorizing Peroxidase from Vibrio cholerae. *Biochemistry*, **2015**, 54, 6610-21	3.2	44
117	Spectroscopic studies on HasA from Yersinia pseudotuberculosis. *Journal of Inorganic Biochemistry*, **2014**, 138, 31-38	4.2	10
116	Heme-Binding Properties of HupD Functioning as a Substrate-Binding Protein in a Heme-Uptake ABC-Transporter System in Listeria monocytogenes. *Bulletin of the Chemical Society of Japan*, **2014**, 87, 1140-1146	5.1	1
115	Molecular Mechanism for Heme-Mediated Inhibition of 5-Aminolevulinic Acid Synthase 1. *Bulletin of the Chemical Society of Japan*, **2014**, 87, 997-1004	5.1	5
114	Unique Heme Environmental Structures in Heme-regulated Proteins Using Heme as the Signaling Molecule. *Chemistry Letters*, **2014**, 43, 1680-1689	1.7	9
113	Sequence and temperature dependence of the end-to-end collision dynamics of single-stranded DNA. *Biophysical Journal*, **2013**, 104, 2485-92	2.9	19
112	Effects of the bHLH domain on axial coordination of heme in the PAS-A domain of neuronal PAS domain protein 2 (NPAS2): conversion from His119/Cys170 coordination to His119/His171 coordination. *Journal of Inorganic Biochemistry*, **2012**, 108, 188-95	4.2	17
111	A heme degradation enzyme, HutZ, from Vibrio cholerae. *Chemical Communications*, **2012**, 48, 6741-3	5.8	29
110	Probing phenylalanine environments in oligomeric structures with pentafluorophenylalanine and cyclohexylalanine. *Biopolymers*, **2011**, 95, 410-9	2.2	3

109	Unusual heme binding in the bacterial iron response regulator protein: spectral characterization of heme binding to the heme regulatory motif. *Biochemistry*, **2011**, 50, 1016-22	3.2	31
108	NMR basis for interprotein electron transfer gating between cytochrome c and cytochrome c oxidase. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 12271-6	11.5	45
107	Identification and functional and spectral characterization of a globin-coupled histidine kinase from Anaeromyxobacter sp. Fw109-5. *Journal of Biological Chemistry*, **2011**, 286, 35522-35534	5.4	38
106	Redox-controlled backbone dynamics of human cytochrome c revealed by 15N NMR relaxation measurements. *Biochemical and Biophysical Research Communications*, **2010**, 398, 231-6	3.4	14
105	Molecular oxygen regulates the enzymatic activity of a heme-containing diguanylate cyclase (HemDGC) for the synthesis of cyclic di-GMP. *Biochimica Et Biophysica Acta - Proteins and Proteomics* , **2010**, 1804, 166-72	4	36
104	Optical manipulation of proteins in aqueous solution. *Applied Surface Science*, **2009**, 255, 9906-9908	6.7	36
103	Hierarchical folding mechanism of apomyoglobin revealed by ultra-fast H/D exchange coupled with 2D NMR. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 13859-64	11.5	79
102	Heme-binding characteristics of the isolated PAS-A domain of mouse Per2, a transcriptional regulatory factor associated with circadian rhythms. *Biochemistry*, **2008**, 47, 6157-68	3.2	50
101	Dehydration of main-chain amides in the final folding step of single-chain monellin revealed by time-resolved infrared spectroscopy. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 13391-6	11.5	34
100	Early Research in Biophysics Award Report on the Third Award Selection Process *Seibutsu Butsuri*, **2008**, 48, 052-055	0	
99	Report of Symposium on Gender Equality in the 45th Annual Meeting of the Biophysical Society of Japan. *Seibutsu Butsuri*, **2008**, 48, 056-057	0	
98	Unique peroxidase reaction mechanism in prostaglandin endoperoxide H synthase-2: compound I in prostaglandin endoperoxide H synthase-2 can be formed without assistance by distal glutamine residue. *Journal of Biological Chemistry*, **2007**, 282, 16681-90	5.4	5
97	S14I4 Structural and Functional Characterization of Sensor Proteins Regulated by Heme Binding(Protein-Ligand Interactions). *Seibutsu Butsuri*, **2007**, 47, S20	0	
96	Molecular basis of guanine nucleotide dissociation inhibitor activity of human neuroglobin by chemical cross-linking and mass spectrometry. *Journal of Molecular Biology*, **2007**, 368, 150-60	6.5	43
95	Volume Profile Analysis for Protein Folding. *Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu*, **2007**, 17, 13-22	0	
94	Early Research in Biophysics Award. *Seibutsu Butsuri*, **2007**, 47, 059-061	0	
93	Dehydration in the folding of reduced cytochrome c revealed by the electron-transfer-triggered folding under high pressure. *Journal of the American Chemical Society*, **2006**, 128, 670-1	16.4	13
92	Time-resolved small-angle X-ray scattering investigation of the folding dynamics of heme oxygenase: implication of the scaling relationship for the submillisecond intermediates of protein folding. *Journal of Molecular Biology*, **2006**, 357, 997-1008	6.5	50

91	S3f1-4 Generality of Initial Collapse Demonstrated by Scaling Relationship for Submillisecond Intermediates of Protein Folding(S3-f1: "Hydration Effects on Structure and Thermodynamics of Proteins,Symposia,Abstract,Meeting Program of EABS & BSJ 2006). *Seibutsu Butsuri*, **2006**, 46, S139	0	
90	Electron transfer reaction in a single protein molecule observed by total internal reflection fluorescence microscopy. *Journal of the American Chemical Society*, **2005**, 127, 2098-103	16.4	9
89	Specifically collapsed intermediate in the early stage of the folding of ribonuclease A. *Journal of Molecular Biology*, **2005**, 350, 349-62	6.5	41
88	Involvement of heme regulatory motif in heme-mediated ubiquitination and degradation of IRP2. *Molecular Cell*, **2005**, 19, 171-81	17.6	122
87	Structural diversities of active site in clinical azole-bound forms between sterol 14alpha-demethylases (CYP51s) from human and Mycobacterium tuberculosis. *Journal of Biological Chemistry*, **2005**, 280, 9088-96	5.4	30
86	Two heme binding sites are involved in the regulated degradation of the bacterial iron response regulator (Irr) protein. *Journal of Biological Chemistry*, **2005**, 280, 7671-6	5.4	71
85	Specific collapse followed by slow hydrogen-bond formation of beta-sheet in the folding of single-chain monellin. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 2748-53	11.5	82
84	Absence of a detectable intermediate in the compound I formation of horseradish peroxidase at ambient temperature. *Journal of Biological Chemistry*, **2005**, 280, 40934-8	5.4	21
83	Regulation Mechanism of Cytochrome P450cam-Catalyzed Oxygenation Reaction upon Putidaredoxin Binding. *Seibutsu Butsuri*, **2005**, 45, 78-83	0	
82	Crystal structure of the cytochrome p450cam mutant that exhibits the same spectral perturbations induced by putidaredoxin binding. *Journal of Biological Chemistry*, **2004**, 279, 42844-9	5.4	47
81	Collapse and search dynamics of apomyoglobin folding revealed by submillisecond observations of alpha-helical content and compactness. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 1171-6	11.5	139
80	Identification of crucial histidines for heme binding in the N-terminal domain of the heme-regulated eIF2alpha kinase. *Journal of Biological Chemistry*, **2004**, 279, 6778-82	5.4	18
79	L358P mutation on cytochrome P450cam simulates structural changes upon putidaredoxin binding: the structural changes trigger electron transfer to oxy-P450cam from electron donors. *Journal of Biological Chemistry*, **2004**, 279, 42836-43	5.4	47
78	Dioxygen reduction by bo-type quinol oxidase from Escherichia coli studied by submillisecond-resolved freeze-quench EPR spectroscopy. *Biochemistry*, **2004**, 43, 2288-96	3.2	4
77	Structural and functional characterization of "laboratory evolved" cytochrome P450cam mutants showing enhanced naphthalene oxygenation activity. *Biochemical and Biophysical Research Communications*, **2004**, 323, 1209-15	3.4	10
76	Steric effects of isoleucine 107 on heme reorientation reaction in human myoglobin. *Biochemical and Biophysical Research Communications*, **2004**, 324, 1095-100	3.4	4
75	Activation mechanisms of transcriptional regulator CooA revealed by small-angle X-ray scattering. *Journal of Molecular Biology*, **2004**, 341, 651-68	6.5	30
74	NMR study on the structural changes of cytochrome P450cam upon the complex formation with putidaredoxin. Functional significance of the putidaredoxin-induced structural changes. *Journal of Biological Chemistry*, **2003**, 278, 39809-21	5.4	42

73	Identification of the ubiquitin-protein ligase that recognizes oxidized IRP2. *Nature Cell Biology*, **2003**, 5, 336-40	23.4	156
72	Iron hemiporphycene as a functional prosthetic group for myoglobin. *Inorganic Chemistry*, **2003**, 42, 1456-61	3.6	36
71	Activation of hydrogen peroxide in horseradish peroxidase occurs within approximately 200 micro s observed by a new freeze-quench device. *Biophysical Journal*, **2003**, 84, 1998-2004	2.9	46
70	Kinetic and spectroscopic characterization of a hydroperoxy compound in the reaction of native myoglobin with hydrogen peroxide. *Journal of Biological Chemistry*, **2003**, 278, 41597-606	5.4	33
69	Conformational landscape of cytochrome c folding studied by microsecond-resolved small-angle x-ray scattering. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 1329-34	11.5	226
68	Direct observation of the multistep helix formation of poly-L-glutamic acids. *Journal of the American Chemical Society*, **2002**, 124, 11596-7	16.4	48
67	NO-induced activation mechanism of the heme-regulated eIF2alpha kinase. *Journal of the American Chemical Society*, **2002**, 124, 13696-7	16.4	15
66	Oxidation-state-dependent protein docking between cytochrome c and cytochrome b(5): high-pressure laser flash photolysis study. *Biochemistry*, **2002**, 41, 9824-32	3.2	10
65	Investigation of the electron-transfer mechanism by cross-linking between Zn-substituted myoglobin and cytochrome b(5). *Journal of the American Chemical Society*, **2002**, 124, 4008-19	16.4	18
64	Roles of the proximal hydrogen bonding network in cytochrome P450cam-catalyzed oxygenation. *Journal of the American Chemical Society*, **2002**, 124, 14571-9	16.4	94
63	Molecular mechanism of the electron transfer reaction in cytochrome P450(cam)--putidaredoxin: roles of glutamine 360 at the heme proximal site. *Biochemistry*, **2002**, 41, 13883-93	3.2	28
62	Pressure Effects on the Intramolecular Electron Transfer Reactions in Hemoproteins **2002**, 187-203		
61	Proximal cysteine residue is essential for the enzymatic activities of cytochrome P450cam. *FEBS Journal*, **2001**, 268, 252-9		46
60	Binding of CO at the Pro2 side is crucial for the activation of CO-sensing transcriptional activator CooA. (1)H NMR spectroscopic studies. *Journal of Biological Chemistry*, **2001**, 276, 11473-6	5.4	45
59	Ligand migration in human myoglobin: steric effects of isoleucine 107(G8) on O(2) and CO binding. *Biophysical Journal*, **2001**, 80, 1507-17	2.9	30
58	Roles of the axial push effect in cytochrome P450cam studied with the site-directed mutagenesis at the heme proximal site. *Journal of Inorganic Biochemistry*, **2000**, 81, 141-51	4.2	109
57	Substitution of the heme binding module in hemoglobin alpha- and beta-subunits. Implication for different regulation mechanisms of the heme proximal structure between hemoglobin and myoglobin. *Journal of Biological Chemistry*, **2000**, 275, 12438-45	5.4	7
56	Unusual pressure effects on ligand rebinding to the human myoglobin Leucine 29 mutants. *Journal of Biological Chemistry*, **2000**, 275, 30309-16	5.4	7

55	Identification of histidine 77 as the axial heme ligand of carbonmonoxy CooA by picosecond time-resolved resonance Raman spectroscopy. *Biochemistry*, **2000**, 39, 12747-52	3.2	63
54	Stepwise formation of alpha-helices during cytochrome c folding. *Nature Structural Biology*, **2000**, 7, 514-20		128
53	Pressure Dependence of the Intramolecular Electron Transfer Reaction in Myoglobin Reinvestigated. *Journal of Physical Chemistry B*, **2000**, 104, 1817-1825	3.4	16
52	Functions of fluctuation in the heme-binding loops of cytochrome b5 revealed in the process of heme incorporation. *Biochemistry*, **2000**, 39, 5961-70	3.2	24
51	Conversion of an Electron-Transfer Protein into an Oxygen Binding Protein:The Axial Cytochromeb5Mutant with an Unusually High O2Affinity. *Journal of the American Chemical Society*, **2000**, 122, 11535-11536	16.4	5
50	Electron transfer reactions in Zn-substituted cytochrome P450cam. *Biochemistry*, **2000**, 39, 10996-1004	3.2	26
49	Direct electron transfer catalysed by recombinant forms of horseradish peroxidase: insight into the mechanism. *Electrochemistry Communications*, **1999**, 1, 171-175	5.1	62
48	Luminol activity of horseradish peroxidase mutants mimicking a proposed binding site for luminol in Arthromyces ramosus peroxidase. *Biochemistry*, **1999**, 38, 10463-73	3.2	15
47	Crystal structure of a protein with an artificial exon-shuffling, module M4-substituted chimera hemoglobin beta alpha, at 2.5 A resolution. *Journal of Molecular Biology*, **1999**, 287, 369-82	6.5	6
46	Roles of valine-98 and glutamic acid-72 of putidaredoxin in the electron-transfer complexes with NADH-putidaredoxin reductase and P450cam. *Inorganica Chimica Acta*, **1998**, 272, 80-88	2.7	26
45	Isothermal titration calorimetric studies on the associations of putidaredoxin to NADH-putidaredoxin reductase and P450cam. *BBA - Proteins and Proteomics*, **1998**, 1384, 180-8		36
44	NMR studies of putidaredoxin: associations of putidaredoxin with NADH-putidaredoxin reductase and cytochrome p450cam. *BBA - Proteins and Proteomics*, **1998**, 1386, 168-78		20
43	Roles of negatively charged surface residues of putidaredoxin in interactions with redox partners in p450cam monooxygenase system. *BBA - Proteins and Proteomics*, **1998**, 1386, 157-67		32
42	Design, construction, crystallization, and preliminary X-ray studies of a fine-tuning mutant (F133V) of module-substituted chimera hemoglobin. *Proteins: Structure, Function and Bioinformatics*, **1998**, 32, 263-7	4.2	2
41	The artificial alpha1beta1-contact mutant hemoglobin, Hb Phe-35beta, shows only small functional abnormalities. *FEBS Letters*, **1998**, 441, 93-6	3.8	5
40	Structural roles of the highly conserved glu residue in the heme distal site of peroxidases. *Biochemistry*, **1998**, 37, 2629-38	3.2	26
39	Detection of a tryptophan radical as an intermediate species in the reaction of horseradish peroxidase mutant (Phe-221 --> Trp) and hydrogen peroxide. *Journal of Biological Chemistry*, **1998**, 273, 14753-60	5.4	33
38	Structural and functional roles of heme binding module in globin proteins: identification of the segment regulating the heme binding structure. *Journal of Molecular Biology*, **1998**, 283, 311-27	6.5	18

37	Structural and functional effects of pseudo-module substitution in hemoglobin subunits. New structural and functional units in globin structure. *Journal of Biological Chemistry*, **1998**, 273, 8080-7	5.4	11
36	Heme environmental structure of CooA is modulated by the target DNA binding. Evidence from resonance Raman spectroscopy and CO rebinding kinetics. *Journal of Biological Chemistry*, **1998**, 273, 19988-92	5.4	47
35	Structureactivity relation of horseradish peroxidases as studied with mutations at heme distal and proximal sites. *Pure and Applied Chemistry*, **1998**, 70, 911-916	2.1	7
34	Catalytic Roles of the Distal Site Hydrogen Bond Network of Peroxidases **1998**, 354-358		
33	Structural and functional roles of modules in hemoglobin. Substitution of module M4 in hemoglobin subunits. *Journal of Biological Chemistry*, **1997**, 272, 30054-60	5.4	20
32	The effects of heme pocket hydrophobicity on the ligand binding dynamics in myoglobin as studied with leucine 29 mutants. *Journal of Biological Chemistry*, **1997**, 272, 30108-14	5.4	36
31	Pressure Effects on Electron Transfer Rates in Zinc/Ruthenium Modified Myoglobins. *Journal of the American Chemical Society*, **1997**, 119, 9582-9583	16.4	18
30	Hydrogen bond network in the distal site of peroxidases: spectroscopic properties of Asn70 --> Asp horseradish peroxidase mutant. *Biochemistry*, **1997**, 36, 9791-8	3.2	42
29	Catalytic activities and structural properties of horseradish peroxidase distal His42 --> Glu or Gln mutant. *Biochemistry*, **1997**, 36, 9889-98	3.2	72
28	Effects of Concerted Hydrogen Bonding of Distal Histidine on Active Site Structures of Horseradish Peroxidase. Resonance Raman Studies with Asn70 Mutants *Journal of the American Chemical Society*, **1997**, 119, 1758-1766	16.4	75
27	Effects of the intramolecular disulfide bond on ligand binding dynamics in myoglobin. *Biochemistry*, **1997**, 36, 324-32	3.2	13
26	Module-substituted globins: artificial exon shuffling among myoglobin, hemoglobin alpha- and beta-subunits. *Biophysical Chemistry*, **1997**, 68, 265-73	3.5	16
25	Preparation and reactions of myoglobin mutants bearing both proximal cysteine ligand and hydrophobic distal cavity: protein models for the active site of P-450. *Biochemistry*, **1996**, 35, 13118-24	3.2	60
24	Characterization of a mutant RecA protein that facilitates homologous genetic recombination but not recombinational DNA repair: RecA423. *Journal of Molecular Biology*, **1996**, 264, 696-712	6.5	21
23	The distal glutamic acid as an acid-base catalyst in the distal site of horseradish peroxidase. *Biochemical and Biophysical Research Communications*, **1996**, 227, 393-9	3.4	19
22	NMR studies of recombinant cytochrome P450cam mutants. *Biochimie*, **1996**, 78, 763-70	4.6	4
21	Catalytic roles of the distal site asparagine-histidine couple in peroxidases. *Biochemistry*, **1996**, 35, 14251-8	3.2	86
20	High-pressure flash photolysis study of hemoprotein: effects of substrate analogues on the recombination of carbon monoxide to cytochrome P450CAM. *Biochemistry*, **1994**, 33, 9762-8	3.2	26

19	Site-directed mutagenesis in hemoglobin: functional and structural role of the penultimate tyrosine in the alpha subunit. *Biochemistry*, **1994**, 33, 2546-53	3.2	14
18	Roles of proximal ligand in heme proteins: replacement of proximal histidine of human myoglobin with cysteine and tyrosine by site-directed mutagenesis as models for P-450, chloroperoxidase, and catalase. *Biochemistry*, **1993**, 32, 241-52	3.2	236
17	Site-directed mutagenesis in hemoglobin: functional and structural study of the intersubunit hydrogen bond of threonine-38(C3)alpha at the alpha 1-beta 2 interface in human hemoglobin. *Biochemistry*, **1993**, 32, 13688-95	3.2	17
16	Effects of intra- and intersubunit hydrogen bonds on the R-T transition in human hemoglobin as studied with alpha 42(C7) and beta 145(HC2) mutations. *Biochemistry*, **1993**, 32, 10165-9	3.2	13
15	NMR study of haem exchange reaction of native myoglobin and haemoglobin. *Magnetic Resonance in Chemistry*, **1993**, 31, S113-S117	2.1	1
14	Characterization and Molecular Design of Hemoproteins by Protein Engineering.. *Seibutsu Butsuri*, **1993**, 33, 212-218	0	
13	Site-directed mutagenesis in hemoglobin: functional and structural role of inter- and intrasubunit hydrogen bonds as studied with 37 beta and 145 beta mutations. *Biochemistry*, **1992**, 31, 3256-64	3.2	52
12	Alteration of human myoglobin proximal histidine to cysteine or tyrosine by site-directed mutagenesis: characterization and their catalytic activities. *Biochemical and Biophysical Research Communications*, **1991**, 180, 138-44	3.4	72
11	Pressure effects on carbon monoxide rebinding to the isolated alpha and beta chains of human hemoglobin. *Biochemistry*, **1991**, 30, 10679-85	3.2	17
10	Site-directed mutagenesis in haemoglobin. Functional role of tyrosine-42(C7) alpha at the alpha 1-beta 2 interface. *Journal of Molecular Biology*, **1991**, 218, 769-78	6.5	45
9	High-pressure laser photolysis study of hemoproteins. Effects of pressure on carbon monoxide binding dynamics for R- and T-state hemoglobins. *Biochemistry*, **1990**, 29, 10199-205	3.2	25
8	Cerebral oxygen utilization analyzed by the use of oxygen-17 and its nuclear magnetic resonance. *Biochemical and Biophysical Research Communications*, **1990**, 169, 153-8	3.4	55
7	Ruthenium-iron hybrid hemoglobins as a model for partially liganded hemoglobin: oxygen equilibrium curves and resonance Raman spectra. *Biochemistry*, **1989**, 28, 8603-9	3.2	5
6	Ruthenium-iron hybrid hemoglobins as a model for partially liganded hemoglobin: NMR studies of their tertiary and quaternary structures. *Biochemistry*, **1988**, 27, 4060-6	3.2	14
5	Study of the specific heme orientation in reconstituted hemoglobins. *Biochemistry*, **1988**, 27, 4747-53	3.2	30
4	Decreased intracellular free magnesium in erythrocytes of spontaneously hypertensive rats. *Biochemical and Biophysical Research Communications*, **1987**, 143, 1012-7	3.4	35
3	Interaction of fully liganded valency hybrid hemoglobin with inositol hexaphosphate. Implication of the IHP-induced T state of human adult methemoglobin in the low-spin state. *Biochemistry*, **1986**, 25, 7243-50	3.2	1
2	NMR study of hybrid hemoglobins containing unnatural heme: effect of heme modification on their tertiary and quaternary structures. *Biochemistry*, **1986**, 25, 4892-8	3.2	18

List of Publications

1 Toxic PR poly-dipeptides encoded by the C9orf72 repeat expansion target Kap2 and dysregulate phase separation of low-complexity domains 2