Yoshitsugu Y Shiro

List of Publications by Year
in descending order

215	8,846	36203	60497
papers	citations	51 h-index	81 g-index

222	222	222	7033
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Crystal structure of human indoleamine 2,3-dioxygenase: Catalytic mechanism of O2 incorporation by a heme-containing dioxygenase. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 2611-2616.	3.3	389
2	Structural Basis of Biological N ₂ O Generation by Bacterial Nitric Oxide Reductase. Science, 2010, 330, 1666-1670.	6.0	292
3	1.25ÂÃ... Resolution Crystal Structures of Human Haemoglobin in the Oxy, Deoxy and Carbonmonoxy Forms. Journal of Molecular Biology, 2006, 360, 690-701.	2.0	261
4	Substrate Recognition and Molecular Mechanism of Fatty Acid Hydroxylation by Cytochrome P450 from Bacillus subtilis. Journal of Biological Chemistry, 2003, 278, 9761-9767.	1.6	198
5	Spectroscopic and Kinetic Studies on Reaction of Cytochrome P450nor with Nitric Oxide. Journal of Biological Chemistry, 1995, 270, 1617-1623.	1.6	189
6	Specific Damage Induced by X-ray Radiation and Structural Changes in the Primary Photoreaction of Bacteriorhodopsin. Journal of Molecular Biology, 2002, 324, 469-481.	2.0	183
7	Crystal structure of nitric oxide reductase from denitrifying fungus Fusarium oxysporum. Nature Structural Biology, 1997, 4, 827-832.	9.7	172
8	Sensory mechanism of oxygen sensor FixL from Rhizobium meliloti : crystallographic, mutagenesis and resonance raman spectroscopic studies 1 1Edited by K. Nagai. Journal of Molecular Biology, 2000, 301, 415-431.	2.0	151
9	Light-dependent regulation of structural flexibility in a photochromic fluorescent protein. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9227-9232.	3.3	150
10	Hydrogen Peroxide Dependent Monooxygenations by Tricking the Substrate Recognition of Cytochrome P450BSÎ². Angewandte Chemie - International Edition, 2007, 46, 3656-3659.	7.2	132
11	Thermophilic cytochrome P450 (CYP119) from Sulfolobus solfataricus: high resolution structure and functional properties. Journal of Inorganic Biochemistry, 2002, 91, 491-501.	1.5	116
12	Crystal structures and catalytic mechanism of cytochrome P450 StaP that produces the indolocarbazole skeleton. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 11591-11596.	3.3	108
13	Unique Binding of Nitric Oxide to Ferric Nitric Oxide Reductase from Fusarium oxysporum Elucidated with Infrared, Resonance Raman, and X-ray Absorption Spectroscopies. Journal of the American Chemical Society, 1997, 119, 7807-7816.	6.6	106
14	Structural Basis of Human Cytoglobin for Ligand Binding. Journal of Molecular Biology, 2004, 339, 873-885.	2.0	106
15	Crystal structure of quinol-dependent nitric oxide reductase from Geobacillus stearothermophilus. Nature Structural and Molecular Biology, 2012, 19, 238-245.	3.6	106
16	Crystal Structure of H2O2-dependent Cytochrome P450SPÎ± with Its Bound Fatty Acid Substrate. Journal of Biological Chemistry, 2011, 286, 29941-29950.	1.6	103
17	Proton Delivery in NO Reduction by Fungal Nitric-oxide Reductase. Journal of Biological Chemistry, 2000, 275, 4816-4826.	1.6	100
18	NO Reduction by Nitric-oxide Reductase from Denitrifying Bacterium Pseudomonas aeruginosa. Journal of Biological Chemistry, 2004, 279, 55247-55254.	1.6	98

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19	The Crystal Structures of the Ferric and Ferrous Forms of the Heme Complex of HmuO, a Heme Oxygenase of Corynebacterium diphtheriae. Journal of Biological Chemistry, 2004, 279, 11937-11947.	1.6	97
20	On the mechanism of the chemical and enzymic oxygenations of alpha-oxyprotohemin IX to Fe.biliverdin IX alpha.. Proceedings of the National Academy of Sciences of the United States of America, 1986, 83, 531-535.	3.3	96
21	Characterization of the Heme Environmental Structure of Cytoglobin, a Fourth Globin in Humansâ€. Biochemistry, 2003, 42, 5133-5142.	1.2	95
22	Structure of PAS-Linked Histidine Kinase and the Response Regulator Complex. Structure, 2009, 17, 1333-1344.	1.6	93
23	Crystal Structure and Peroxidase Activity of Myoglobin Reconstituted with Iron Porphycene. Inorganic Chemistry, 2006, 45, 10530-10536.	1.9	89
24	Structure and function of bacterial nitric oxide reductases. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1907-1913.	0.5	85
25	Separation of phosphoprotein isotypes having the same number of phosphate groups using phosphateâ€affinity SDSâ€PAGE. Proteomics, 2008, 8, 2994-3003.	1.3	81
26	Density Functional Theory Study on a Missing Piece in Understanding of Heme Chemistry: The Reaction Mechanism for Indoleamine 2,3-Dioxygenase and Tryptophan 2,3-Dioxygenase. Journal of the American Chemical Society, 2008, 130, 12299-12309.	6.6	80
27	Crystal Structure of CYP105A1 (P450SU-1) in Complex with 1Î±,25-Dihydroxyvitamin D₃[,]. Biochemistry, 2008, 47, 4017-4027.	1.2	78
28	Calcium binding by horseradish peroxidase c and the heme environmental structure. Biochemical and Biophysical Research Communications, 1979, 90, 674-678.	1.0	77
29	Transient Intermediates from Mn(salen) with Sterically Hindered Mesityl Groups: Interconversion between Mn^{IV}-Phenolate and Mn^{III}-Phenoxyl Radicals as an Origin for Unique Reactivity. Inorganic Chemistry, 2008, 47, 1674-1686.	1.9	77
30	ONIOM Study on a Missing Piece in Our Understanding of Heme Chemistry: Bacterial Tryptophan 2,3-Dioxygenase with Dual Oxidants. Journal of the American Chemical Society, 2010, 132, 11993-12005.	6.6	74
31	Capturing an initial intermediate during the P450nor enzymatic reaction using time-resolved XFEL crystallography and caged-substrate. Nature Communications, 2017, 8, 1585.	5.8	74
32	Electronic Structure of Reaction Intermediate of Cytochrome P450nor in Its Nitric Oxide Reduction. Journal of the American Chemical Society, 1998, 120, 12964-12965.	6.6	73
33	Activation of Wild-Type Cytochrome P450BM3 by the Next Generation of Decoy Molecules: Enhanced Hydroxylation of Gaseous Alkanes and Crystallographic Evidence. ACS Catalysis, 2015, 5, 150-156.	5.5	73
34	Iron-Ligand Structure and Iron Redox Property of Nitric Oxide Reductase Cytochrome P450nor from Fusarium oxysporum: Relevance to Its NO Reduction Activity. Biochemistry, 1995, 34, 9052-9058.	1.2	69
35	EPR Characterization of Axial Bond in Metal Center of Native and Cobalt-substituted Guanylate Cyclase. Journal of Biological Chemistry, 1999, 274, 7714-7723.	1.6	67
36	Unique Properties and Reactivity of High-Valent Manganeseâ€'Oxo versus Manganeseâ€'Hydroxo in the Salen Platform. Inorganic Chemistry, 2010, 49, 6664-6672.	1.9	67

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37	Crystal structure of rat biliverdin reductase. Nature Structural Biology, 2001, 8, 221-225.	9.7	66
38	Theoretical and Experimental Studies of the Conversion of Chromopyrrolic Acid to an Antitumor Derivative by Cytochrome P450 StaP: The Catalytic Role of Water Molecules. Journal of the American Chemical Society, 2009, 131, 6748-6762.	6.6	64
39	Direct observation of photolysis-induced tertiary structural changes in hemoglobin. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 7039-7044.	3.3	63
40	Structural Characterization of the Proximal and Distal Histidine Environment of Cytoglobin and Neuroglobin. Biochemistry, 2005, 44, 13257-13265.	1.2	62
41	Direct Hydroxylation of Benzene to Phenol by Cytochrome P450BM3 Triggered by Amino Acid Derivatives. Angewandte Chemie - International Edition, 2017, 56, 10324-10329.	7.2	62
42	Manganese(V) Porphycene Complex Responsible for Inert Câ€“H Bond Hydroxylation in a Myoglobin Matrix. Journal of the American Chemical Society, 2017, 139, 18460-18463.	6.6	60
43	Redox Properties and Coordination Structure of the Heme in the CO-sensing Transcriptional Activator CooA. Journal of Biological Chemistry, 2001, 276, 7055-7061.	1.6	59
44	Infrared Spectroscopic and Mutational Studies on Putidaredoxin-Induced Conformational Changes in Ferrous CO-P450camâ€,â€¡. Biochemistry, 2003, 42, 14507-14514.	1.2	58
45	Iron Coordination Structures of Oxygen Sensor FixL Characterized by Fe K-edge Extended X-ray Absorption Fine Structure and Resonance Raman Spectroscopy. Journal of Biological Chemistry, 1999, 274, 23176-23184.	1.6	57
46	Enzymatic Reaction of Hydrogen Peroxide-Dependent Peroxygenase Cytochrome P450s:Â Kinetic Deuterium Isotope Effects and Analyses by Resonance Raman Spectroscopy. Biochemistry, 2002, 41, 1886-1892.	1.2	57
47	Peroxide-utilizing biocatalysts: structural and functional diversity of heme-containing enzymes. Current Opinion in Chemical Biology, 2004, 8, 127-132.	2.8	57
48	Nitrogen-15 NMR study on cyanide (C15N-) complex of cytochrome P-450cam. Effects of d-camphor and putidaredoxin on the iron-ligand structure. Journal of the American Chemical Society, 1989, 111, 7707-7711.	6.6	55
49	X-ray Crystal Structure of Michaelis Complex of Aldoxime Dehydratase. Journal of Biological Chemistry, 2009, 284, 32089-32096.	1.6	55
50	Structural Basis for the Transcriptional Regulation of Heme Homeostasis in Lactococcus lactis. Journal of Biological Chemistry, 2012, 287, 30755-30768.	1.6	55
51	Escherichia coli Cytosolic Glycerophosphodiester Phosphodiesterase (UgpQ) Requires Mg ²⁺ , Co ²⁺ , or Mn ²⁺ for Its Enzyme Activity. Journal of Bacteriology, 2008, 190, 1219-1223.	1.0	54
52	The Mechanism of Electron Donation to Molecular Oxygen by Phagocytic Cytochrome b558. Journal of Biological Chemistry, 1995, 270, 7853-7857.	1.6	53
53	Structural Characterization of a Thiazoline-Containing Chromophore in an Orange Fluorescent Protein, Monomeric Kusabira Orange. Biochemistry, 2008, 47, 11573-11580.	1.2	53
54	Nature of Endogenous Ligand Binding to Heme Iron in Oxygen Sensor FixL. Journal of the American Chemical Society, 1996, 118, 9434-9435.	6.6	52

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55	Molecular structure and function of bacterial nitric oxide reductase. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 680-687.	0.5	52
56	Characterization of the oxygenated intermediate of the thermophilic cytochrome P450 CYP119. Journal of Inorganic Biochemistry, 2001, 87, 215-226.	1.5	51
57	Separation of a phosphorylated histidine protein using phosphate affinity polyacrylamide gel electrophoresis. Analytical Biochemistry, 2007, 360, 160-162.	1.1	50
58	Spectroscopic study of Ser92 mutants of human myoglobin: Hydrogen bonding effect of Ser92 to proximal His93 on structure and property of myoglobin. Biochemistry, 1994, 33, 14986-14992.	1.2	49
59	A Novel Glycerophosphodiester Phosphodiesterase, GDE5, Controls Skeletal Muscle Development via a Non-enzymatic Mechanism. Journal of Biological Chemistry, 2010, 285, 27652-27663.	1.6	49
60	A substrate-binding-state mimic of H₂O₂-dependent cytochrome P450 produced by one-point mutagenesis and peroxygenation of non-native substrates. Catalysis Science and Technology, 2016, 6, 5806-5811.	2.1	49
61	YC-1 Facilitates Release of the Proximal His Residue in the NO and CO Complexes of Soluble Guanylate Cyclase. Journal of Biological Chemistry, 2003, 278, 11130-11137.	1.6	48
62	Observation of a calcium-binding site in the Î³-class carbonic anhydrase fromPyrococcus horikoshii. Acta Crystallographica Section D: Biological Crystallography, 2008, 64, 1012-1019.	2.5	48
63	Structural basis for nitrous oxide generation by bacterial nitric oxide reductases. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 1195-1203.	1.8	47
64	Structure-Based Design of a Highly Active Vitamin D Hydroxylase from Streptomyces griseolus CYP105A1. Biochemistry, 2008, 47, 11964-11972.	1.2	46
65	Crystal structures of cytochrome P450nor and its mutants (Ser286â†'Val, Thr) in the ferric resting state at cryogenic temperature: a comparative analysis with monooxygenase cytochrome P450s. Journal of Inorganic Biochemistry, 2000, 81, 191-205.	1.5	45
66	Roles of Ile209 and Ile210 on the Heme Pocket Structure and Regulation of Histidine Kinase Activity of Oxygen Sensor FixL fromRhizobium melilotiâ€. Biochemistry, 2000, 39, 13810-13816.	1.2	45
67	Crystallization and Preliminary X-ray Diffraction Studies of Nitric Oxide Reductase Cytochrome P450nor from Fusarium oxysporum. Journal of Molecular Biology, 1994, 239, 158-159.	2.0	44
68	Purification and functional characterization of human 11Î² hydroxylase expressed in Escherichiaâ€ƒcoli. FEBS Journal, 2008, 275, 799-810.	2.2	44
69	Structural Characterization ofn-Butyl-isocyanide Complexes of Cytochromes P450nor and P450camâ€. Biochemistry, 2001, 40, 2669-2677.	1.2	43
70	Excited States of Fluorescent Proteins, mKO and DsRed: Chromophoreâ^'Protein Electrostatic Interaction Behind the Color Variations. Journal of Physical Chemistry B, 2010, 114, 2971-2979.	1.2	43
71	Palladium-Nanoparticle-Catalyzed 1,7-Palladium Migration Involving Câ€"H Activation, Followed by Intramolecular Amination: Regioselective Synthesis of N1-Arylbenzotriazoles and an Evaluation of Their Inhibitory Activity toward Indoleamine 2,3-Dioxygenase. Journal of Organic Chemistry, 2014, 79, 6366-6371.	1.7	43
72	Structure and Ligand Binding Properties of Myoglobins Reconstituted with Monodepropionated Heme:â€‰ Functional Role of Each Heme Propionate Side Chain,. Biochemistry, 2007, 46, 9406-9416.	1.2	42

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73	Crystal structure of bacterial haem importer complex in the inward-facing conformation. Nature Communications, 2016, 7, 13411.	5.8	40
74	A Positively Charged Cluster Formed in the Heme-distal Pocket of Cytochrome P450nor Is Essential for Interaction with NADH. Journal of Biological Chemistry, 2001, 276, 5020-5026.	1.6	39
75	Diversity and Substrate Specificity in the Structures of Steroidogenic Cytochrome P450 Enzymes. Biological and Pharmaceutical Bulletin, 2012, 35, 818-823.	0.6	39
76	Optical monitoring of freeze-trapped reaction intermediates in protein crystals: a microspectrophotometer for cryogenic protein crystallography. Journal of Applied Crystallography, 2002, 35, 270-273.	1.9	38
77	Hybrid Respiration in the Denitrifying Mitochondria of Fusarium oxysporum. Journal of Biochemistry, 2003, 133, 461-465.	0.9	38
78	Crystal Structure of VioE, a Key Player in the Construction of the Molecular Skeleton of Violacein. Journal of Biological Chemistry, 2008, 283, 6459-6466.	1.6	38
79	Architecture of the complete oxygen-sensing FixL-FixJ two-component signal transduction system. Science Signaling, 2018, 11, .	1.6	38
80	NMR studies of metalloporphyrin radicals. Iron(II) oxophlorin radical formed from iron(III) meso-hydroxyoctaethylporphyrin. Journal of the American Chemical Society, 1986, 108, 3858-3860.	6.6	36
81	Structural characterization of lactoperoxidase in the heme environment by proton NMR spectroscopy. Biochemistry, 1986, 25, 5844-5849.	1.2	36
82	X-ray absorption spectral study of ferric high-spin hemoproteins: XANES evidences for coordination structure of the heme iron. Journal of the American Chemical Society, 1990, 112, 2921-2924.	6.6	36
83	Understanding substrate misrecognition of hydrogen peroxide dependent cytochrome P450 from Bacillus subtilis. Journal of Biological Inorganic Chemistry, 2010, 15, 1331-1339.	1.1	35
84	Dynamics of nitric oxide controlled by protein complex in bacterial system. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9888-9893.	3.3	35
85	Heme environmental structure of a novel artificial myoglobin with a closed heme pocket: site-specific chemical modification producing distal N-tetrazolylhistidine E7 by cyanogen bromide and azide ion. Journal of the American Chemical Society, 1991, 113, 1826-1829.	6.6	34
86	Site-Directed Mutagenesis of the Conserved Threonine (Thr243) of the Distal Helix of Fungal Cytochrome P450norâ€. Biochemistry, 1998, 37, 8839-8847.	1.2	34
87	Inhibition of Heme Uptake in Pseudomonas aeruginosa by its Hemophore (HasA_p) Bound to Synthetic Metal Complexes. Angewandte Chemie - International Edition, 2014, 53, 2862-2866.	7.2	34
88	Novel Ligand Binding Properties of the Myoglobin Substituted with Monoazahemin. Journal of Biological Chemistry, 1995, 270, 13118-13123.	1.6	33
89	ADP reduces the oxygen-binding affinity of a sensory histidine kinase, FixL: The possibility of an enhanced reciprocating kinase reaction. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 2742-2746.	3.3	33
90	Design and Synthesis ofde NovoCytochromescâ€. Biochemistry, 2004, 43, 9823-9833.	1.2	33

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91	Threeâ€step hydroxylation of vitamin D₃ by a genetically engineered CYP105A1. FEBS Journal, 2010, 277, 3999-4009.	2.2	33
92	Crystal structures of nitric oxide reductases provide key insights into functional conversion of respiratory enzymes. IUBMB Life, 2013, 65, 217-226.	1.5	33
93	Disulfide bonds regulate binding of exogenous ligand to human cytoglobin. Journal of Inorganic Biochemistry, 2014, 135, 20-27.	1.5	32
94	The effects of heme modification on reactivity, ligand binding properties and iron-coordination structures of cytochrome P450nor. BBA - Proteins and Proteomics, 1998, 1384, 103-111.	2.1	31
95	Roles of the Heme Distal Residues of FixL in O2 Sensing:â€‰ A Single Convergent Structure of the Heme Moiety Is Relevant to the Downregulation of Kinase Activity. Biochemistry, 2006, 45, 2515-2523.	1.2	31
96	Kinetics and Thermodynamics of CO Binding to Cytochrome P450nor. Biochemistry, 1994, 33, 8673-8677.	1.2	30
97	Contribution of heme-propionate side chains to structure and function of myoglobin: chemical approach by artificially created prosthetic groups. Journal of Inorganic Biochemistry, 2002, 91, 94-100.	1.5	30
98	Bioconversion of vitamin D to its active form by bacterial or mammalian cytochrome P450. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 249-256.	1.1	30
99	Control of stereoselectivity of benzylic hydroxylation catalysed by wild-type cytochrome P450BM3 using decoy molecules. Catalysis Science and Technology, 2017, 7, 3332-3338.	2.1	30
100	The uncoupling of oxygen sensing, phosphorylation signalling and transcriptional activation in oxygen sensor FixL and FixJ mutants. Molecular Microbiology, 2003, 48, 373-383.	1.2	29
101	Identification of the Feâ€“O2 and the Fe=O Heme Species for Indoleamine 2,3-Dioxygenase during Catalytic Turnover. Chemistry Letters, 2010, 39, 36-37.	0.7	29
102	Structural basis for oxygen sensing and signal transduction of the heme-based sensor protein Aer2 from Pseudomonas aeruginosa. Chemical Communications, 2012, 48, 6523.	2.2	29
103	Structures of reduced and ligandâ€bound nitric oxide reductase provide insights into functional differences in respiratory enzymes. Proteins: Structure, Function and Bioinformatics, 2014, 82, 1258-1271.	1.5	29
104	O2-specific regulation of the ferrous heme-based sensor kinase FixL from Sinorhizobium meliloti and its aberrant inactivation in the ferric form. Biochemical and Biophysical Research Communications, 2003, 304, 136-142.	1.0	28
105	High-resolution structure of human cytoglobin: identification of extra N- and C-termini and a new dimerization mode. Acta Crystallographica Section D: Biological Crystallography, 2006, 62, 671-677.	2.5	28
106	Modification of the heme distal side in myoglobin by cyanogen bromide. Heme environmental structures and ligand binding properties of the modified myoglobin. Biochemistry, 1984, 23, 4879-4884.	1.2	27
107	Nuclear magnetic resonance studies of porphyrin .pi.-cation radical in ruthenium(II)-substituted horseradish peroxidase and some implications for the electronic state of peroxidase compound I. Biochemistry, 1986, 25, 3576-3584.	1.2	27
108	The Signaling Pathway in Histidine Kinase and the Response Regulator Complex Revealed by X-ray Crystallography and Solution Scattering. Journal of Molecular Biology, 2006, 362, 123-139.	2.0	27

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109	Hemeâ€dependent autophosphorylation of a heme sensor kinase, ChrS, from Corynebacterium diphtheriae reconstituted in proteoliposomes. FEBS Letters, 2009, 583, 2244-2248.	1.3	27
110	Î±-Oxidative decarboxylation of fatty acids catalysed by cytochrome P450 peroxygenases yielding shorter-alkyl-chain fatty acids. Catalysis Science and Technology, 2018, 8, 434-442.	2.1	27
111	Hijacking the Heme Acquisition System of Pseudomonas aeruginosa for the Delivery of Phthalocyanine as an Antimicrobial. ACS Chemical Biology, 2019, 14, 1637-1642.	1.6	27
112	Molecular Dynamics Simulations Reveal Proton Transfer Pathways in Cytochrome C-Dependent Nitric Oxide Reductase. PLoS Computational Biology, 2012, 8, e1002674.	1.5	27
113	Chiralâ€Substrateâ€Assisted Stereoselective Epoxidation Catalyzed by H₂O₂â€Dependent Cytochrome P450_{SPÎ±}. Chemistry - an Asian Journal, 2012, 7, 2286-2293.	1.7	26
114	Properties of Two Distinct Heme Centers of Cytochrome b561 from Bovine Chromaffin Vesicles Studied by EPR, Resonance Raman, and Ascorbate Reduction Assay. Journal of Biochemistry, 2004, 135, 53-64.	0.9	25
115	Molecular Design of Heteroprotein Assemblies Providing a Bionanocup as a Chemical Reactor. Small, 2008, 4, 50-54.	5.2	25
116	Identification of the Hydrophobic Amino Acid Residues Required for Heme Assembly in the Rhizobial Oxygen Sensor Protein FixL. Biochemical and Biophysical Research Communications, 1998, 247, 427-431.	1.0	24
117	Structure of cytochromec6from the red algaPorphyra yezoensisat 1.57â€…Ã… resolution. Acta Crystallographica Section D: Biological Crystallography, 2000, 56, 1577-1582.	2.5	24
118	Synthesis and biological activity of 1-methyl-tryptophan-tirapazamine hybrids as hypoxia-targeting indoleamine 2,3-dioxygenase inhibitors. Bioorganic and Medicinal Chemistry, 2008, 16, 8661-8669.	1.4	24
119	Initial O₂ Insertion Step of the Tryptophan Dioxygenase Reaction Proposed by a Heme-Modification Study. Biochemistry, 2015, 54, 3604-3616.	1.2	24
120	Meso deuterium NMR hyperfine shift as a probe for determining five- or six-coordination at heme iron binding site in ferric high-spin hemoproteins. Journal of the American Chemical Society, 1985, 107, 1063-1065.	6.6	23
121	Resonance Raman Observation of the Structural Dynamics of FixL on Signal Transduction and Ligand Discrimination. Biochemistry, 2007, 46, 6086-6096.	1.2	23
122	Direct Hydroxylation of Benzene to Phenol by Cytochrome P450BM3 Triggered by Amino Acid Derivatives. Angewandte Chemie, 2017, 129, 10460-10465.	1.6	23
123	Reconstitution of full-length P450BM3 with an artificial metal complex by utilising the transpeptidase Sortase A. Chemical Communications, 2018, 54, 7892-7895.	2.2	23
124	Myoglobin Mutants Giving the Largest Geminate Yield in CO Rebinding in the Nanosecond Time Domain. Biophysical Journal, 1998, 75, 2188-2194.	0.2	22
125	Mutation effects of a conserved threonine (Thr243) of cytochrome P450nor on its structure and function. Journal of Inorganic Biochemistry, 2000, 82, 103-111.	1.5	22
126	Tolerance of the Rieske-type [2Fe-2S] cluster in recombinant ferredoxin BphA3 from Pseudomonas sp. KKS102 to histidine ligand mutations. Biochemical Journal, 2005, 388, 869-878.	1.7	22

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127	Structural Basis of the Signal Transduction in the Two-Component System. Advances in Experimental Medicine and Biology, 2008, 631, 22-39.	0.8	22
128	Ligand Energy Controls the Heme-Fe Valence in Aqueous Myoglobins. Journal of the Physical Society of Japan, 2009, 78, 044802.	0.7	22
129	Crystal structure of the carbon monoxide complex of human cytoglobin. Proteins: Structure, Function and Bioinformatics, 2011, 79, 1143-1153.	1.5	22
130	Characterization of the quinol-dependent nitric oxide reductase from the pathogen Neisseria meningitidis, an electrogenic enzyme. Scientific Reports, 2018, 8, 3637.	1.6	22
131	Crystallization and preliminary X-ray diffraction analysis of a cytochrome P450 (CYP119) fromSulfolobus solfataricus. Acta Crystallographica Section D: Biological Crystallography, 2000, 56, 1173-1175.	2.5	21
132	X-ray structure of nitric oxide reductase (cytochrome P450nor) at atomic resolution. Acta Crystallographica Section D: Biological Crystallography, 2002, 58, 81-89.	2.5	21
133	Short-lived intermediate in N ₂ O generation by P450 NO reductase captured by time-resolved IR spectroscopy and XFEL crystallography. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	21
134	Functional and structural comparison of nitric oxide reductases from denitrifying fungi Cylindrocarpon tonkinense and Fusarium oxysporum. BBA - Proteins and Proteomics, 1997, 1338, 93-99.	2.1	20
135	Solution Structure of the C-Terminal Transcriptional Activator Domain of FixJ from Sinorhizobium meliloti and Its Recognition of the fixK Promoter,. Biochemistry, 2005, 44, 14835-14844.	1.2	20
136	Crystal Structure and Spectroscopic Studies of a Stable Mixed-Valent State of the Hemerythrin-like Domain of a Bacterial Chemotaxis Protein. Inorganic Chemistry, 2011, 50, 4892-4899.	1.9	20
137	Consequence of rapid heme rotation to the oxygen binding of myoglobin. BBA - Proteins and Proteomics, 1994, 1208, 31-37.	2.1	19
138	Crystallization, preliminary diffraction and electron paramagnetic resonance studies of a single crystal of cytochromeP450nor. FEBS Letters, 1997, 412, 346-350.	1.3	19
139	Cooperative Binding of l-Trp to Human Tryptophan 2,3-Dioxygenase: Resonance Raman Spectroscopic Analysis. Journal of Biochemistry, 2009, 145, 505-515.	0.9	18
140	Mg2+ Dependence of 70 S Ribosomal Protein Flexibility Revealed by Hydrogen/Deuterium Exchange and Mass Spectrometry. Journal of Biological Chemistry, 2010, 285, 5646-5652.	1.6	18
141	Characterization and Functional Modification of StaC and RebC, Which Are Involved in the Pyrrole Oxidation of Indolocarbazole Biosynthesis. Bioscience, Biotechnology and Biochemistry, 2011, 75, 2184-2193.	0.6	18
142	Structure-Function Analyses of Cytochrome P450revI Involved in Reveromycin A Biosynthesis and Evaluation of the Biological Activity of Its Substrate, Reveromycin T. Journal of Biological Chemistry, 2014, 289, 32446-32458.	1.6	18
143	Crystallization and Preliminary X-Ray Diffraction Analysis of a Recombinant Bacterial Heme Oxygenase (Hmu O) from Corynebacterium diphtheriae. Journal of Structural Biology, 1999, 126, 171-174.	1.3	17
144	Resonance Raman study on the oxygenated and the ferryl-oxo species of indoleamine 2,3-dioxygenase during catalytic turnover. Faraday Discussions, 2011, 148, 239-247.	1.6	17

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145	Surface-Enhanced Infrared Absorption Spectroscopy of Bacterial Nitric Oxide Reductase under Electrochemical Control Using a Vibrational Probe of Carbon Monoxide. Journal of Physical Chemistry Letters, 2018, 9, 5196-5200.	2.1	17
146	Protein engineering of CYP105s for their industrial uses. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2018, 1866, 23-31.	1.1	16
147	Crystallization and preliminary X-ray diffraction analysis of fatty-acid hydroxylase cytochrome P450BSÎ² fromBacillus subtilis. Acta Crystallographica Section D: Biological Crystallography, 2002, 58, 687-689.	2.5	15
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