Shun Hirota

List of Publications by Year
in descending order

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204	5,968	66234	110170
papers	citations	42 h-index	64 g-index

212	212	212	4903
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Activation Process of [NiFe] Hydrogenase Elucidated by High-Resolution X-Ray Analyses: Conversion of the Ready to the Unready State. Structure, 2005, 13, 1635-1642.	1.6	248
2	Structural Studies of the Carbon Monoxide Complex of [NiFe]hydrogenase from Desulfovibrio vulgaris Miyazaki F:â€‰ Suggestion for the Initial Activation Site for Dihydrogen. Journal of the American Chemical Society, 2002, 124, 11628-11635.	6.6	235
3	Cytochrome c polymerization by successive domain swapping at the C-terminal helix. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12854-12859.	3.3	148
4	Crystal Structure and Reversible O2-Binding of a Room Temperature Stable Î¼-Î·2:Î·2-Peroxodicopper(II) Complex of a Sterically Hindered Hexapyridine Dinucleating Ligand. Journal of the American Chemical Society, 1999, 121, 11006-11007.	6.6	145
5	Time-resolved resonance Raman elucidation of the pathway for dioxygen reduction by cytochrome c oxidase. Journal of the American Chemical Society, 1993, 115, 8527-8536.	6.6	124
6	â€œClick Peptideâ€•Based on the â€œO-Acyl Isopeptide Methodâ€•Â Control of AÎ²1â^'42 Production from a Photo-Triggered AÎ²1â^'42 Analogue. Journal of the American Chemical Society, 2006, 128, 696-697.	6.6	110
7	Role of Copper Ion in Bacterial Copper Amine Oxidase:Â Spectroscopic and Crystallographic Studies of Metal-Substituted Enzymes. Journal of the American Chemical Society, 2003, 125, 1041-1055.	6.6	106
8	Ligand Binding Properties of Myoglobin Reconstituted with Iron Porphycene:Â Unusual O2Binding Selectivity against CO Binding1. Journal of the American Chemical Society, 2004, 126, 16007-16017.	6.6	94
9	Time-Resolved Resonance Raman Evidence for Tight Coupling between Electron Transfer and Proton Pumping of CytochromecOxidase upon the Change from the FeVOxidation Level to the FeIVOxidation Level. Journal of the American Chemical Society, 1996, 118, 5443-5449.	6.6	93
10	Hydroperoxoâ^'Copper(II) Complex Stabilized by N3S-Type Ligand Having a Phenyl Thioether. Journal of the American Chemical Society, 2001, 123, 7715-7716.	6.6	85
11	Thermodynamics of apoplastocyanin folding: Comparison between experimental and theoretical results. Journal of Chemical Physics, 2008, 128, 225104.	1.2	85
12	Iron Porphyrinâ^'Cyclodextrin Supramolecular Complex as a Functional Model of Myoglobin in Aqueous Solution. Inorganic Chemistry, 2006, 45, 4448-4460.	1.9	84
13	Resonance Raman Investigation of Feâ^'Nâ^'O Structure of Nitrosylheme in Myoglobin and Its Mutants. Journal of Physical Chemistry B, 1999, 103, 7044-7054.	1.2	82
14	Dioxygen Binding to a Simple Myoglobin Model in Aqueous Solution. Angewandte Chemie - International Edition, 2005, 44, 435-438.	7.2	80
15	Perturbation of the Feâ^'O2 Bond by Nearby Residues in Heme Pocket:â€‰ Observation of Î½Fe-O2 Raman Bands for Oxymyoglobin Mutants. Journal of the American Chemical Society, 1996, 118, 7845-7846.	6.6	78
16	Observation of a New Oxygen-Isotope-Sensitive Raman Band for Oxyhemoproteins and Its Implications in Heme Pocket Structures. Journal of the American Chemical Society, 1994, 116, 10564-10570.	6.6	76
17	Creation of an artificial metalloprotein with a Hoveydaâ€“Grubbs catalyst moiety through the intrinsic inhibition mechanism of Î±-chymotrypsin. Chemical Communications, 2012, 48, 1662.	2.2	75
18	Peroxidase activity enhancement of horse cytochrome c by dimerization. Organic and Biomolecular Chemistry, 2011, 9, 4766.	1.5	72

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19	Second and Outer Coordination Sphere Effects in Nitrogenase, Hydrogenase, Formate Dehydrogenase, and CO Dehydrogenase. Chemical Reviews, 2022, 122, 11900-11973.	23.0	70
20	Metal Ion-Assisted Weak Interactions Involving Biological Molecules. From Small Complexes to Metalloproteins. Bulletin of the Chemical Society of Japan, 2001, 74, 1525-1545.	2.0	69
21	Development of novel water-soluble photocleavable protective group and its application for design of photoresponsive paclitaxel prodrugs. Bioorganic and Medicinal Chemistry, 2008, 16, 5389-5397.	1.4	67
22	A new class of rhodamine luminophores: design, syntheses and aggregation-induced emission enhancement. Chemical Communications, 2010, 46, 9013.	2.2	67
23	Synthesis, Structure, and Greatly Improved Reversible O2 Binding in a Structurally Modulatedî¼-î·2:î·2-Peroxodicopper(II) Complex with Room-Temperature Stability. Angewandte Chemie - International Edition, 2004, 43, 334-337.	7.2	66
24	Four-electron Reduction of Dioxygen by a Multicopper Oxidase, CueO, and Roles of Asp112 and Glu506 Located Adjacent to the Trinuclear Copper Center. Journal of Biological Chemistry, 2009, 284, 14405-14413.	1.6	66
25	Near-IR FT-Raman Spectroscopy of Methyl-B12 and Other Cobalamins and of Imidazole and Imidazolate Methylcobinamide Derivatives in Aqueous Solution. Inorganic Chemistry, 1996, 35, 4656-4662.	1.9	62
26	Studies on galactose oxidase active site model complexes: effects of ring substituents on Cu(II)-phenoxyl radical formation. Inorganica Chimica Acta, 2002, 331, 168-177.	1.2	58
27	Two-Dimensional NMR Study on the Structures of Micelles of Sodium Taurocholate. Journal of Physical Chemistry B, 2004, 108, 438-443.	1.2	57
28	Chemical Approach to the Cu(II)-Phenoxyl Radical Site in Galactose Oxidase: Dependence of the Radical Stability on N-Donor Properties. Bulletin of the Chemical Society of Japan, 2000, 73, 1187-1195.	2.0	56
29	Development of first photoresponsive prodrug of paclitaxel. Bioorganic and Medicinal Chemistry Letters, 2006, 16, 4492-4496.	1.0	55
30	DNA Cleavage by the Photocontrolled Cooperation of Zn^{II}Centers in an Azobenzene-Linked Dizinc Complex. Inorganic Chemistry, 2011, 50, 11437-11445.	1.9	54
31	Efficient Oxidative Cycloreversion Reaction of Photochromic Dithiazolythiazole. Journal of the American Chemical Society, 2012, 134, 19877-19883.	6.6	54
32	Nickel(II)â^'Phenoxyl Radical Complexes:Â Structureâ^'Radical Stability Relationship. Inorganic Chemistry, 2004, 43, 7816-7822.	1.9	53
33	Vibrational Assignments of the FeCO Unit of CO-Bound Heme Proteins Revisited: Observation of a New CO-Isotope-Sensitive Raman Band Assignable to the FeCO Bending Fundamental. The Journal of Physical Chemistry, 1994, 98, 6652-6660.	2.9	51
34	Kinetic and Structural Studies on the Catalytic Role of the Aspartic Acid Residue Conserved in Copper Amine Oxidaseâ€,â€¡. Biochemistry, 2006, 45, 4105-4120.	1.2	50
35	Observation of Multiple CN-Isotope-Sensitive Raman Bands for CN-Adducts of Hemoglobin, Myoglobin, and CytochromecOxidase:Â Evidence for Vibrational Coupling between the Feâ^'Câ^'N Bending and Porphyrin In-Plane Modes. The Journal of Physical Chemistry, 1996, 100, 15274-15279.	2.9	49
36	Structural and oxygen binding properties of dimeric horse myoglobin. Dalton Transactions, 2012, 41, 11378.	1.6	47

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37	Oxoferryl Porphyrin/Hydrogen Peroxide System Whose Behavior is Equivalent to Hydroperoxoferric Porphyrin. Journal of the American Chemical Society, 2010, 132, 16730-16732.	6.6	46
38	Structural basis of the redox switches in the NAD ⁺ -reducing soluble [NiFe]-hydrogenase. Science, 2017, 357, 928-932.	6.0	46
39	A Supramolecular Receptor of Diatomic Molecules (O₂, CO, NO) in Aqueous Solution. Journal of the American Chemical Society, 2008, 130, 8006-8015.	6.6	45
40	Artificial enzymes with protein scaffolds: Structural design and modification. Bioorganic and Medicinal Chemistry, 2014, 22, 5638-5656.	1.4	45
41	A Role of the Heme-7-Propionate Side Chain in Cytochrome P450cam as a Gate for Regulating the Access of Water Molecules to the Substrate-Binding Site. Journal of the American Chemical Society, 2009, 131, 1398-1400.	6.6	44
42	Synthesis, Characterization, and Activation of Thermally Stable Î¼-1,2-Peroxodiiron(III) Complex. Inorganic Chemistry, 2001, 40, 4821-4822.	1.9	43
43	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
44	Photocontrol of Spatial Orientation and DNA Cleavage Activity of Copper(II)-Bound Dipeptides Linked by an Azobenzene Derivative. Inorganic Chemistry, 2008, 47, 5045-5047.	1.9	41
45	Effect of Heme Modification on Oxygen Affinity of Myoglobin and Equilibrium of the Acidâ^'Alkaline Transition in Metmyoglobin. Journal of the American Chemical Society, 2010, 132, 6091-6098.	6.6	41
46	Domain Swapping of the Heme and N-Terminal Î±-Helix in Hydrogenobacter thermophilus Cytochrome c₅₅₂ Dimer. Biochemistry, 2012, 51, 8608-8616.	1.2	41
47	Control of the Transition between Niâ€C and Niâ€SI_a States by the Redox State of the Proximal Feï£¿S Cluster in the Catalytic Cycle of [NiFe] Hydrogenase. Angewandte Chemie - International Edition, 2014, 53, 13817-13820.	7.2	41
48	Micelle formation of bile salts and zwitterionic derivative as studied by two-dimensional NMR spectroscopy. Chemistry and Physics of Lipids, 2006, 142, 43-57.	1.5	40
49	Formation of a Bridged Butterfly-Type Î¼-Î·²:Î·²-Peroxo Dicopper Core Structure with a Carboxylate Group. Journal of the American Chemical Society, 2008, 130, 16444-16445.	6.6	40
50	Formation of Oligomeric Cytochrome c during Folding by Intermolecular Hydrophobic Interaction between N- and C-Terminal Î±-Helices. Biochemistry, 2013, 52, 8732-8744.	1.2	40
51	Self-oxidation of cytochrome c at methionine80 with molecular oxygen induced by cleavage of the Metâ€“heme iron bond. Molecular BioSystems, 2014, 10, 3130-3137.	2.9	40
52	Trapping of a Dopaquinone Intermediate in the TPQ Cofactor Biogenesis in a Copper-Containing Amine Oxidase fromArthrobacterglobiformis. Journal of the American Chemical Society, 2007, 129, 11524-11534.	6.6	39
53	Proton Transfer Mechanisms in Bimetallic Hydrogenases. Accounts of Chemical Research, 2021, 54, 232-241.	7.6	39
54	The Coâ^'CH3Bond in Imine/Oxime B12Models. Influence of the Orientation and Donor Properties of thetransLigand As Assessed by FT-Raman Spectroscopy. Inorganic Chemistry, 1996, 35, 5646-5653.	1.9	38

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55	Interactions of Cytochromecand Cytochromefwith Aspartic Acid Peptides. Journal of the American Chemical Society, 1999, 121, 849-855.	6.6	38
56	Controlled Production of Amyloid Î² Peptide from a Photoâ€Triggered, Waterâ€Soluble Precursor â€œClick Peptideâ€œ. ChemBioChem, 2008, 9, 3055-3065.	1.3	38
57	Effect of Added Salt on Ring-Closing Metathesis Catalyzed by a Water-Soluble Hoveydaâ€“Grubbs Type Complex To Form N-Containing Heterocycles in Aqueous Media. Organometallics, 2013, 32, 5313-5319.	1.1	38
58	Domain-swapped cytochrome cb₅₆₂dimer and its nanocage encapsulating a Znâ€“SO₄cluster in the internal cavity. Chemical Science, 2015, 6, 7336-7342.	3.7	37
59	Observation of the Fe-O2and FeIV=O stretching Raman bands for dioxygen reduction intermediates of cytochromeboisolated fromEscherichia coli. FEBS Letters, 1994, 352, 67-70.	1.3	36
60	Design of artificial metalloproteins/metalloenzymes by tuning noncovalent interactions. Journal of Biological Inorganic Chemistry, 2018, 23, 7-25.	1.1	36
61	H-atom abstraction reaction for organic substrates via mononuclear copper(ii)-superoxo species as a model for DÎ²M and PHM. Dalton Transactions, 2008, , 164-170.	1.6	35
62	Conformational Changes during Apoplastocyanin Folding Observed by Photocleavable Modification and Transient Grating. Journal of the American Chemical Society, 2006, 128, 7551-7558.	6.6	34
63	Excimer Emission Properties on Pyrene-Labeled Protein Surface: Correlation between Emission Spectra, Ring Stacking Modes, and Flexibilities of Pyrene Probes. Bioconjugate Chemistry, 2015, 26, 537-548.	1.8	34
64	Characterization of the Cytochromeâ€¦c Membraneâ€Binding Site Using Cardiolipinâ€Containing Bicelles with NMR. Angewandte Chemie - International Edition, 2016, 55, 14019-14022.	7.2	34
65	Comprehensive reaction mechanisms at and near the Niâ€“Fe active sites of [NiFe] hydrogenases. Dalton Transactions, 2018, 47, 4408-4423.	1.6	34
66	Enhancement of Laccase Activity through the Construction and Breakdown of a Hydrogen Bond at the Type I Copper Center in Escherichia coli CueO and the Deletion Mutant Î”Î±5â^'7 CueO. Biochemistry, 2011, 50, 558-565.	1.2	33
67	Analysis of the active sites of copper/topa quinone-containing amine oxidases fromLathyrus odoratus andL. sativus seedlings. Phytochemical Analysis, 1998, 9, 211-222.	1.2	31
68	Tetrahedral Distortion in Copper(II) Complexes of (â^')-Sparteine and Its Effect on the Oxygen Adduct Formation. Chemistry Letters, 2000, 29, 1172-1173.	0.7	31
69	Thermodynamical properties of reaction intermediates during apoplastocyanin folding in time domain. Journal of Chemical Physics, 2007, 127, 175103.	1.2	31
70	Rational Design of Heterodimeric Protein using Domain Swapping for Myoglobin. Angewandte Chemie - International Edition, 2015, 54, 511-515.	7.2	31
71	Cysteine SH and Glutamate COOH Contributions to [NiFe] Hydrogenase Proton Transfer Revealed by Highly Sensitive FTIR Spectroscopy. Angewandte Chemie - International Edition, 2019, 58, 13285-13290.	7.2	31
72	Roles of Four Iron Centers inParacoccus halodenitrificansNitric Oxide Reductase. Biochemical and Biophysical Research Communications, 1998, 251, 248-251.	1.0	30

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73	â€˜Click peptideâ€™: a novel â€˜O-acyl isopeptide methodâ€™ for peptide synthesis and chemical biology-oriented synthesis of amyloid Î² peptide analogues. Journal of Peptide Science, 2006, 12, 823-828.	0.8	30
74	Post-Translational His-Cys Cross-Linkage Formation in Tyrosinase Induced by Copper(II)â^'Peroxo Species. Journal of the American Chemical Society, 2011, 133, 1180-1183.	6.6	30
75	Spectroscopic Observation of Intermediates Formed during the Oxidative Half-Reaction of Copper/Topa Quinone-Containing Phenylethylamine Oxidase. Biochemistry, 2001, 40, 15789-15796.	1.2	29
76	Masking Mechanisms of Bitter Taste of Drugs Studied with Ion Selective Electrodes. Chemical and Pharmaceutical Bulletin, 2006, 54, 1155-1161.	0.6	29
77	The Coî—¸CH3 bond in Shiff base B12 models: influence of the trans and equatorial ligands as assessed by Fourier transform Raman spectroscopy. Inorganica Chimica Acta, 1998, 275-276, 90-97.	1.2	28
78	Plastocyaninâ^'Peptide Interactions. Effects of Lysine Peptides on Protein Structure and Electron-Transfer Character. Journal of the American Chemical Society, 1998, 120, 8177-8183.	6.6	28
79	Coherent dynamics and ultrafast excited state relaxation of blue copper protein; plastocyanin. Physical Chemistry Chemical Physics, 2010, 12, 6067.	1.3	28
80	Supramolecular Organization of Lightâ€Harvesting Porphyrin Macrorings. Chemistry - A European Journal, 2011, 17, 855-865.	1.7	28
81	FT-IR Characterization of the Light-Induced Ni-L2 and Ni-L3 States of [NiFe] Hydrogenase from Desulfovibrio vulgaris Miyazaki F. Journal of Physical Chemistry B, 2015, 119, 13668-13674.	1.2	28
82	Molecular structure of redox metal centers of the cytochrome bo complex from Escherichia coli. Spectroscopic characterizations of the subunit I histidine mutant oxidases.. Journal of Biological Chemistry, 1994, 269, 30861-30868.	1.6	27
83	Construction of Giant Porphyrin Macrorings Selfâ€Assembled from Thiophenyleneâ€Linked Bisporphyrins for Lightâ€Harvesting Antennae. Chemistry - A European Journal, 2008, 14, 10735-10744.	1.7	26
84	Reduction of Bis(dithiolene)oxo(disulfido)tungsten(VI) Complex with Dihydrogen Related to the Chemical Function of the Fourth Tungsten-Containing Enzyme (WOR4) from Pyrococcus furiosus. Journal of the American Chemical Society, 2010, 132, 8-9.	6.6	26
85	Reinvestigation of Metal Ion Specificity for Quinone Cofactor Biogenesis in Bacterial Copper Amine Oxidase,. Biochemistry, 2005, 44, 12041-12048.	1.2	25
86	Nature of Cysteine-Based Re(V)O(N2S2) Radiopharmaceuticals at Physiological pH Ascertained by Investigation of a New Complex with aMesoN2S2Ligand Having Carboxyl Groups Anti to the Oxo Group. Inorganic Chemistry, 2000, 39, 5731-5740.	1.9	24
87	Formation of Domain-Swapped Oligomer of Cytochrome c from Its Molten Globule State Oligomer. Biochemistry, 2014, 53, 4696-4703.	1.2	24
88	Spectroscopic Characterization of Carbon Monoxide Complexes Generated for Copper/Topa Quinone-Containing Amine Oxidasesâ€. Biochemistry, 1999, 38, 14256-14263.	1.2	23
89	Oligomerization of cytochrome c, myoglobin, and related heme proteins by 3D domain swapping. Journal of Inorganic Biochemistry, 2019, 194, 170-179.	1.5	23
90	A Myoglobin Functional Model Composed of a Ferrous Porphyrin and a Cyclodextrin Dimer with an Imidazole Linker. Chemistry - an Asian Journal, 2006, 1, 358-366.	1.7	22

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91	A Single Spherical Assembly of Protein Amyloid Fibrils Formed by Laser Trapping. Angewandte Chemie - International Edition, 2017, 56, 6739-6743.	7.2	22
92	Resonance raman study on axial ligands of heme irons in cytochromebd-type ubiquinol oxidase fromEscherichia coli. Biospectroscopy, 1995, 1, 305-311.	0.4	21
93	Relationship between Oxygen Affinity and Autoxidation of Myoglobin. Inorganic Chemistry, 2012, 51, 11955-11960.	1.9	21
94	Chemical Rescue of a Site-Specific Mutant of Bacterial Copper Amine Oxidase for Generation of the Topa Quinone Cofactorâ€. Biochemistry, 2004, 43, 2178-2187.	1.2	20
95	Evaluation of the Functional Role of the Heme-6-propionate Side Chain in Cytochrome P450cam. Journal of the American Chemical Society, 2008, 130, 432-433.	6.6	20
96	Molecular mode of interaction of plant amine oxidase with the mechanism-based inhibitor 2-butyne-1,4-diamine. FEBS Journal, 2000, 267, 1423-1433.	0.2	19
97	Domain-Swapped Dimer of Pseudomonas aeruginosa Cytochrome c551: Structural Insights into Domain Swapping of Cytochrome c Family Proteins. PLoS ONE, 2015, 10, e0123653.	1.1	19
98	Determination of proton concentration at cardiolipin-containing membrane interfaces and its relation with the peroxidase activity of cytochromec. Chemical Science, 2019, 10, 9140-9151.	3.7	19
99	Recent developments on creation of artificial metalloenzymes. Tetrahedron Letters, 2019, 60, 151226.	0.7	19
100	Folding Character of CytochromecStudied byo-Nitrobenzyl Modification of Methionine 65 and Subsequent Ultraviolet Light Irradiationâ€. Biochemistry, 2000, 39, 7538-7545.	1.2	18
101	Oxygen Binding to Tyrosinase from Streptomyces antibioticus Studied by Laser Flash Photolysis. Journal of the American Chemical Society, 2005, 127, 17966-17967.	6.6	18
102	Electron transfer from cytochrome c to cupredoxins. Journal of Biological Inorganic Chemistry, 2009, 14, 821-828.	1.1	18
103	Change in structure and ligand binding properties of hyperstable cytochrome c₅₅₅ from <scp>A</scp>quifex aeolicus by domain swapping. Protein Science, 2015, 24, 366-375.	3.1	18
104	A Superoxodicopper(II) Complex Oxidatively Generated by a Reaction of Di-Î¼-hydroxodicopper(II) Complex with Hydrogen Peroxide. Chemistry Letters, 1998, 27, 389-390.	0.7	17
105	Heme Reduction by Intramolecular Electron Transfer in Cysteine Mutant Myoglobin under Carbon Monoxide Atmosphere. Biochemistry, 2005, 44, 10322-10327.	1.2	17
106	Molecular structure of redox metal centers of the cytochrome bo complex from Escherichia coli. Spectroscopic characterizations of the subunit I histidine mutant oxidases. Journal of Biological Chemistry, 1994, 269, 30861-8.	1.6	17
107	Observation of Nonfundamental Fe-O2 and Fe-CO Vibrations and Potential Anharmonicities for Oxyhemoglobin and Carbonmonoxyhemoglobin. Evidence Supporting a New Assignment of the Fe-C-O Bending Fundamental. Journal of the American Chemical Society, 1995, 117, 821-822.	6.6	16
108	Factors Influencing the pKaof Ligated Amines and the Syn/Anti Isomerization in Cysteine-Based Re(V)O(N2S2) Radiopharmaceutical Analogues As Revealed by a Novel Dominant Tautomer in the Solid State. Inorganic Chemistry, 1999, 38, 5351-5358.	1.9	16

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109	Regulating Copperâ€Binding Affinity with Photoisomerizable Azobenzene Ligand by Construction of a Selfâ€Assembled Monolayer. Angewandte Chemie - International Edition, 2009, 48, 6065-6068.	7.2	16
110	Dimer domain swapping versus monomer folding in apo-myoglobin studied by molecular simulations. Physical Chemistry Chemical Physics, 2015, 17, 5006-5013.	1.3	16
111	Photoactivation of the Ni-SI_r state to the Ni-SI_a state in [NiFe] hydrogenase: FT-IR study on the light reactivity of the ready Ni-SI_r state and as-isolated enzyme revisited. Physical Chemistry Chemical Physics, 2016, 18, 22025-22030.	1.3	16
112	Relationship between the Electron Density of the Heme Fe Atom and the Vibrational Frequencies of the Fe-Bound Carbon Monoxide in Myoglobin. Inorganic Chemistry, 2013, 52, 3349-3355.	1.9	15
113	Morphological Change of Cell Membrane by Interaction with Domainâ€Swapped Cytochrome c Oligomers. ChemBioChem, 2014, 15, 517-521.	1.3	15
114	Oligomerization enhancement and two domain swapping mode detection for thermostable cytochrome c₅₅₂via the elongation of the major hinge loop. Molecular BioSystems, 2015, 11, 3218-3221.	2.9	15
115	Resonance Raman, Infrared, and EPR Investigation on the Binuclear Site Structure of the Heme-Copper Ubiquinol Oxidases from Acetobacter aceti:â€‰ Effect of the Heme Peripheral Formyl Group Substitution. Biochemistry, 1997, 36, 13034-13042.	1.2	14
116	Spectroscopic and Electrochemical Studies on Structural Change of Plastocyanin and Its Tyrosine 83 Mutants Induced by Interaction with Lysine Peptidesâ€. Biochemistry, 2000, 39, 6357-6364.	1.2	14
117	Stable supramolecular complex of porphyrin macroring with pyridyl and fullerenyl ligands. Tetrahedron Letters, 2008, 49, 5484-5487.	0.7	14
118	Oxidative modification of methionine80 in cytochrome c by reaction with peroxides. Journal of Inorganic Biochemistry, 2018, 182, 200-207.	1.5	14
119	Redox-dependent conformational changes of a proximal [4Feâ€“4S] cluster in Hyb-type [NiFe]-hydrogenase to protect the active site from O₂. Chemical Communications, 2018, 54, 12385-12388.	2.2	14
120	Effects of charged peptides on electron transfer from [Fe(CN)6]4â€“ to cytochrome c or plastocyanin. Journal of Biological Inorganic Chemistry, 1998, 3, 563-569.	1.1	13
121	Observation of Cuâ€“Nâˆ’3Stretching and Nâˆ’3Asymmetric Stretching Bands formono-Azide Adduct ofRhus verniciferaLaccase. Biochemical and Biophysical Research Communications, 1998, 243, 435-437.	1.0	13
122	Molecular Basis of the Bohr Effect in Arthropod Hemocyanin. Journal of Biological Chemistry, 2008, 283, 31941-31948.	1.6	13
123	Reversible Switching of Fluorophore Property Based on Intrinsic Conformational Transition of Adenylate Kinase during Its Catalytic Cycle. Bioconjugate Chemistry, 2013, 24, 1218-1225.	1.8	13
124	DNA cleavage by oxymyoglobin and cysteine-introduced metmyoglobin. Chemical Communications, 2014, 50, 15034-15036.	2.2	13
125	Electronic Control of Discrimination between O2 and CO in Myoglobin Lacking the Distal Histidine Residue. Inorganic Chemistry, 2014, 53, 1091-1099.	1.9	13
126	Domain swapping oligomerization of thermostable c-type cytochrome in E. coli cells. Scientific Reports, 2016, 6, 19334.	1.6	13

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127	Formation and carbon monoxideâ€dependent dissociation of Allochromatium vinosum cytochrome câ€² oligomers using domainâ€swapped dimers. Protein Science, 2017, 26, 464-474.	3.1	13
128	Two amine oxidases from Aspergillus niger AKU 3302 contain topa quinone as the cofactor: unusual cofactor link to the glutamyl residue occurs only at one of the enzymes. BBA - Proteins and Proteomics, 1996, 1295, 59-72.	2.1	12
129	A New Class of Sulfido/Oxo(dithiolene)â^'Molybdenum(IV) Complexes Derived from Sulfido/Oxo-Bis(tetrasulfido)molybdenum(IV) Anions. Inorganic Chemistry, 2008, 47, 10150-10157.	1.9	12
130	A simple interfacial pH detection method for cationic amphiphilic self-assemblies utilizing a Schiff-base molecule. Analyst, The, 2016, 141, 2030-2039.	1.7	12
131	Effect of methionine80 heme coordination on domain swapping of cytochrome c. Journal of Biological Inorganic Chemistry, 2017, 22, 705-712.	1.1	12
132	Activation Mechanism of the Streptomyces Tyrosinase Assisted by the Caddie Protein. Biochemistry, 2017, 56, 5593-5603.	1.2	12
133	New Aspects of Cytochrome c: 3D Domain Swapping, Membrane Interaction, Peroxidase Activity, and Met80 Sulfoxide Modification. Bulletin of the Chemical Society of Japan, 2021, 94, 170-182.	2.0	12
134	Reply to the Comment on â€œTwo-Dimensional NMR Study on the Structures of Micelles of Sodium Taurocholateâ€. Journal of Physical Chemistry B, 2005, 109, 9851-9852.	1.2	11
135	Maintenance of the secondary structure of horse cytochrome c during the conversion process of monomers to oligomers by addition of ethanol. Journal of Biochemistry, 2012, 152, 521-529.	0.9	11
136	Photosensitivity of the Ni-A state of [NiFe] hydrogenase from Desulfovibrio vulgaris Miyazaki F with visible light. Biochemical and Biophysical Research Communications, 2013, 430, 284-288.	1.0	11
137	Electronic Control of Ligand-Binding Preference of a Myoglobin Mutant. Inorganic Chemistry, 2014, 53, 9156-9165.	1.9	11
138	Equilibrium between inactive ready Ni-SI_r and active Ni-SI_a states of [NiFe] hydrogenase studied by utilizing Ni-SI_r-to-Ni-SI_a photoactivation. Chemical Communications, 2017, 53, 10444-10447.	2.2	11
139	Rational Design of Domainâ€Swappingâ€Based câ€Type Cytochrome Heterodimers by Using Chimeric Proteins. ChemBioChem, 2017, 18, 1712-1715.	1.3	11
140	Cysteine SH and Glutamate COOH Contributions to [NiFe] Hydrogenase Proton Transfer Revealed by Highly Sensitive FTIR Spectroscopy. Angewandte Chemie, 2019, 131, 13419-13424.	1.6	11
141	Mechanism and Application of the Catalytic Reaction of [NiFe] Hydrogenase: Recent Developments. ChemBioChem, 2020, 21, 1573-1581.	1.3	11
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