Takashi Hayashi

List of Publications by Year
in descending order

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214 papers	6,376 citations	57719 44 h-index	98753 67 g-index
240 all docs	240 docs citations	240 times ranked	4193 citing authors

#	Article	IF	Citations
1	New Functionalization of Myoglobin by Chemical Modification of Heme-Propionates. Accounts of Chemical Research, 2002, 35, 35-43.	7.6	200
2	Molecular modelling of electron transfer systems by noncovalently linked porphyrinâ€“acceptor pairing. Chemical Society Reviews, 1997, 26, 355-364.	18.7	186
3	Pentacoordinate anionic bis(siliconates) containing a fluorine bridge between two silicon atoms. Synthesis, solid-state structures, and dynamic behavior in solution. Organometallics, 1992, 11, 2099-2114.	1.1	183
4	C(sp³)â€“H Bond Hydroxylation Catalyzed by Myoglobin Reconstituted with Manganese Porphycene. Journal of the American Chemical Society, 2013, 135, 17282-17285.	6.6	140
5	Blue Myoglobin Reconstituted with an Iron Porphycene Shows Extremely High Oxygen Affinity. Journal of the American Chemical Society, 2002, 124, 11226-11227.	6.6	128
6	A hydrogenase model system based on the sequence of cytochrome c: photochemical hydrogen evolution in aqueous media. Chemical Communications, 2011, 47, 8229.	2.2	121
7	Hemoproteins Reconstituted with Artificial Metal Complexes as Biohybrid Catalysts. Accounts of Chemical Research, 2019, 52, 945-954.	7.6	118
8	Supramolecular Hemoprotein Linear Assembly by Successive Interprotein Hemeâ‹¯Heme Pocket Interactions. Journal of the American Chemical Society, 2007, 129, 10326-10327.	6.6	115
9	Catalytic Cyclopropanation by Myoglobin Reconstituted with Iron Porphycene: Acceleration of Catalysis due to Rapid Formation of the Carbene Species. Journal of the American Chemical Society, 2017, 139, 17265-17268.	6.6	110
10	Peroxidase Activity of Myoglobin Is Enhanced by Chemical Mutation of Heme-Propionates. Journal of the American Chemical Society, 1999, 121, 7747-7750.	6.6	103
11	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
12	Photoinduced Hydrogen Evolution Catalyzed by a Synthetic Diiron Dithiolate Complex Embedded within a Protein Matrix. ACS Catalysis, 2014, 4, 2645-2648.	5.5	92
13	Crystal Structure and Peroxidase Activity of Myoglobin Reconstituted with Iron Porphycene. Inorganic Chemistry, 2006, 45, 10530-10536.	1.9	89
14	Iron Porphyrinâ‹¯Cyclodextrin Supramolecular Complex as a Functional Model of Myoglobin in Aqueous Solution. Inorganic Chemistry, 2006, 45, 4448-4460.	1.9	84
15	Hybridization of Modified-Heme Reconstitution and Distal Histidine Mutation to Functionalize Sperm Whale Myoglobin. Journal of the American Chemical Society, 2004, 126, 436-437.	6.6	79
16	A rhodium complex-linked Î²-barrel protein as a hybrid biocatalyst for phenylacetylene polymerization. Chemical Communications, 2012, 48, 9756.	2.2	78
17	Hemoprotein-based supramolecular assembling systems. Current Opinion in Chemical Biology, 2014, 19, 154-161.	2.8	76
18	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

#	Article	IF	Citations
19	Novel pentacoordinate anionic silicate, [o-C6H4(SiPhF2)2F]-K+.cntdot.18-crown-6, containing a bent fluoride bridge between two silicon atoms. Journal of the American Chemical Society, 1990, 112, 2422-2424.	6.6	73
20	Chemically Programmed Supramolecular Assembly of Hemoprotein and Streptavidin with Alternating Alignment. Angewandte Chemie - International Edition, 2012, 51, 3818-3821.	7.2	72
21	Electrochemical reactions mediated by vitamin B12 derivatives in organic solvents. Coordination Chemistry Reviews, 2000, 198, 21-37.	9.5	71
22	A Whole Cell E. coli Display Platform for Artificial Metalloenzymes: Poly(phenylacetylene) Production with a Rhodiumâ€“Nitrobindin Metalloprotein. ACS Catalysis, 2018, 8, 2611-2614.	5.5	71
23	Cobaltporphycenes as Catalysts. The Oxidation of Vinyl Ethers via the Formation and Dissociation of Cobaltâ”Carbon Bonds. Organometallics, 2001, 20, 3074-3078.	1.1	69
24	Meso-Unsubstituted Iron Corrole in Hemoproteins: Remarkable Differences in Effects on Peroxidase Activities between Myoglobin and Horseradish Peroxidase. Journal of the American Chemical Society, 2009, 131, 15124-15125.	6.6	69
25	Supramolecular assembling systems formed by hemeâ€“heme pocket interactions in hemoproteins. Chemical Communications, 2012, 48, 11714.	2.2	68
26	A Highly Active Biohybrid Catalyst for Olefin Metathesis in Water: Impact of a Hydrophobic Cavity in a Î²-Barrel Protein. ACS Catalysis, 2015, 5, 7519-7522.	5.5	68
27	Specific molecular recognition via multipoint hydrogen bonding ubiquinone analogs - porphyrin having four convergent hydroxyl groups pairing. Journal of the American Chemical Society, 1993, 115, 2049-2051.	6.6	67
28	Anion complexation by bidentate Lewis acidic hosts, ortho-bis(fluorosilyl) benzenes. Journal of Organometallic Chemistry, 1996, 506, 85-91.	0.8	66
29	Porphyrinoid Chemistry in Hemoprotein Matrix:â€‰ Detection and Reactivities of Iron(IV)-Oxo Species of Porphycene Incorporated into Horseradish Peroxidase. Journal of the American Chemical Society, 2007, 129, 12906-12907.	6.6	66
30	Selfâ€Assembly of Oneâ€and Twoâ€Dimensional Hemoprotein Systems by Polymerization through Hemeâ€“Heme Pocket Interactions. Angewandte Chemie - International Edition, 2009, 48, 1271-1274.	7.2	66
31	Chiral recognition and chiral sensing using zinc porphyrin dimers. Tetrahedron, 2002, 58, 2803-2811.	1.0	64
32	Photocatalytic hydrogen evolution by a diiron hydrogenase model based on a peptide fragment of cytochrome c556 with an attached diiron carbonyl cluster and an attached ruthenium photosensitizer. Journal of Inorganic Biochemistry, 2012, 108, 159-162.	1.5	63
33	Molecular Recognition of Ubiquinone Analogues. Specific Interaction between Quinone and Functional Porphyrin via Multiple Hydrogen Bonds. Journal of the American Chemical Society, 1997, 119, 7281-7290.	6.6	61
34	Artificial Proteinâ”Protein Complexation between a Reconstituted Myoglobin and Cytochromec. Journal of the American Chemical Society, 1998, 120, 4910-4915.	6.6	61
35	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
36	Photoinduced Singlet Electron Transfer in a Complex Formed from Zinc Myoglobin and Methyl Viologen: Artificial Recognition by a Chemically Modified Porphyrin. Journal of the American Chemical Society, 1995, 117, 11606-11607.	6.6	59

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37	Molecular recognition of Î±,Ï‰-diamines by metalloporphyrin dimer. Tetrahedron Letters, 1997, 38, 1603-1606.	0.7	58
38	Thermoresponsive Micellar Assembly Constructed from a Hexameric Hemoprotein Modified with Poly(N-isopropylacrylamide) toward an Artificial Light-Harvesting System. Journal of the American Chemical Society, 2020, 142, 1822-1831.	6.6	57
39	Dynamic molecular recognition in a multifunctional porphyrin and a ubiquinone analog. Journal of the American Chemical Society, 1993, 115, 12210-12211.	6.6	55
40	Residues in the Distal Heme Pocket of Neuroglobin. Journal of Biological Chemistry, 2004, 279, 5886-5893.	1.6	55
41	Synthesis, Structure, and Chemical Property of the First Fluorine-Containing Porphycene. Organic Letters, 2003, 5, 2845-2848.	2.4	53
42	A chemically-controlled supramolecular protein polymer formed by a myoglobin-based self-assembly system. Chemical Science, 2011, 2, 1033.	3.7	52
43	Precise Design of Artificial Cofactors for Enhancing Peroxidase Activity of Myoglobin: Myoglobin Mutant H64D Reconstituted with a â€œSingleâ€Winged Cofactorâ€•Is Equivalent to Native Horseradish Peroxidase in Oxidation Activity. Chemistry - an Asian Journal, 2011, 6, 2491-2499.	1.7	48
44	Reductive Activation of Dioxygen by a Myoglobin Reconstituted with a Flavohemin. Journal of the American Chemical Society, 2002, 124, 11234-11235.	6.6	47
45	Chiral paddle-wheel diruthenium complexes for asymmetric catalysis. Nature Catalysis, 2020, 3, 851-858.	16.1	47
46	mesoâ€Dibenzoporphycene has a Large Bathochromic Shift and a Porphycene Framework with an Unusual cis Tautomeric Form. Angewandte Chemie - International Edition, 2015, 54, 6227-6230.	7.2	46
47	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
48	Photocurrent Generation from Hierarchical Zincâ€Substituted Hemoprotein Assemblies Immobilized on a Gold Electrode. Angewandte Chemie - International Edition, 2012, 51, 2628-2631.	7.2	45
49	An Extremely Long-Lived Singlet 4,4-Dimethoxy-3,5-diphenylpyrazolidine-3,5-diyl Derivative: A Notable Nitrogen-Atom Effect on Intra- and Intermolecular Reactivity. Angewandte Chemie - International Edition, 2006, 45, 7828-7831.	7.2	44
50	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
51	Iron Twin-Coronet Porphyrins as Models of Myoglobin and Hemoglobin: Amphibious Electrostatic Effects of Overhanging Hydroxyl Groups for Successful CO/O2 Discrimination. Chemistry - A European Journal, 2003, 9, 862-870.	1.7	43
52	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
53	Preparation and O2Binding Study of Myoglobin Having a Cobalt Porphycene. Inorganic Chemistry, 2005, 44, 9391-9396.	1.9	40
54	Rab5-regulated endocytosis plays a crucial role in apical extrusion of transformed cells. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E2327-E2336.	3.3	40

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55	Unusual Ligand Discrimination by a Myoglobin Reconstituted with a Hydrophobic Domain-Linked Heme. Journal of the American Chemical Society, 2005, 127, 56-57.	6.6	39
56	Co(<scp>ii</scp>)/Co(<scp>i</scp>) reduction-induced axial histidine-flipping in myoglobin reconstituted with a cobalt tetradehydrocorrin as a methionine synthase model. Chemical Communications, 2014, 50, 12560-12563.	2.2	39
57	Cavity Size Engineering of a Î²-Barrel Protein Generates Efficient Biohybrid Catalysts for Olefin Metathesis. ACS Catalysis, 2018, 8, 3358-3364.	5.5	39
58	Fabrication of enzyme-degradable and size-controlled protein nanowires using single particle nano-fabrication technique. Nature Communications, 2014, 5, 3718.	5.8	38
59	Electroorganic chemistry. 118. Electroreductive intermolecular coupling of ketones with olefins. Journal of Organic Chemistry, 1989, 54, 6001-6003.	1.7	37
60	Electronic and steric effects in pentacoordinate anionic diorganotrifluorosilicates: x-ray structures and carbon-13 NMR studies for evaluation of charge distribution in aryl groups on silicon. Organometallics, 1992, 11, 182-191.	1.1	36
61	Artificial hydrogenase: biomimetic approaches controlling active molecular catalysts. Current Opinion in Chemical Biology, 2015, 25, 133-140.	2.8	36
62	Photoinduced Electron Transfer between Multifunctional Porphyrin and Ubiquinone Analogues Linked by Several Hydrogen-Bonding Interactions. Angewandte Chemie International Edition in English, 1996, 35, 1964-1966.	4.4	35
63	Experimental Probe for Hyperconjugative Resonance Contribution in Stabilizing the Singlet State of 2,2-Dialkoxy-1,3-diyls:Â Regioselective 1,2-Oxygen Migration. Journal of the American Chemical Society, 2006, 128, 8008-8014.	6.6	34
64	Time-resolved Raman evidence for energy â€˜funnelingâ€™ through propionate side chains in heme â€˜coolingâ€™ upon photolysis of carbonmonoxy myoglobin. Chemical Physics Letters, 2006, 429, 239-243.	1.2	34
65	Construction of a hybrid biocatalyst containing a covalently-linked terpyridine metal complex within a cavity of aponitrobindin. Journal of Inorganic Biochemistry, 2016, 158, 55-61.	1.5	34
66	Artificial Dielsâ€“Alderase based on the transmembrane protein FhuA. Beilstein Journal of Organic Chemistry, 2016, 12, 1314-1321.	1.3	33
67	Rhodiumâ€Complexâ€Linked Hybrid Biocatalyst: Stereoâ€Controlled Phenylacetylene Polymerization within an Engineered Protein Cavity. ChemCatChem, 2014, 6, 1229-1235.	1.8	32
68	Generation of New Artificial Metalloproteins by Cofactor Modification of Native Hemoproteins. Israel Journal of Chemistry, 2015, 55, 76-84.	1.0	32
69	Myoglobins engineered with artificial cofactors serve as artificial metalloenzymes and models of natural enzymes. Dalton Transactions, 2021, 50, 1940-1949.	1.6	32
70	Interprotein Electron Transfer Reaction Regulated by an Artificial Interface. Angewandte Chemie - International Edition, 2001, 40, 1098-1101.	7.2	31
71	Intraprotein transmethylation via a CH₃â€“Co(<scp>iii</scp>) species in myoglobin reconstituted with a cobalt corrinoid complex. Dalton Transactions, 2016, 45, 3277-3284.	1.6	31
72	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

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73	Energy migration within hexameric hemoprotein reconstituted with Zn porphyrinoid molecules. Chemical Communications, 2015, 51, 11138-11140.	2.2	30
74	Supramolecular Hemoprotein Assembly with a Periodic Structure Showing Hemeâ€“Heme Exciton Coupling. Journal of the American Chemical Society, 2018, 140, 10145-10148.	6.6	30
75	A water-soluble supramolecular complex that mimics the heme/copper hetero-binuclear site of cytochromecoxidase. Chemical Science, 2018, 9, 1989-1995.	3.7	29
76	Electroorganic syntheses of macrocyclic lactones mediated by vitamin B12 model complexes. Journal of Electroanalytical Chemistry, 2001, 507, 170-176.	1.9	28
77	Synthesis, Characterization, and Autoreduction of a Highly Electron-Deficient Porphycenatoiron(III) with Trifluoromethyl Substituents. Inorganic Chemistry, 2003, 42, 7345-7347.	1.9	28
78	Ligand binding properties of two kinds of reconstituted myoglobins with iron porphycene having propionates: Effect of Î²-pyrrolic position of two propionate side chains in porphycene framework. Journal of Inorganic Biochemistry, 2006, 100, 1265-1271.	1.5	28
79	Supramolecular hemoproteinâ€“gold nanoparticle conjugates. Chemical Communications, 2010, 46, 9107.	2.2	28
80	Conformational Analysis of Î²-Turn Structure in Tetrapeptides Containing Proline or Proline Analogs. Tetrahedron Letters, 1997, 38, 3039-3042.	0.7	27
81	A Structural Isomer of Nonaromatic Porphyrin:â€‰ Preparation of 20Ï€-Conjugated Porphycene Based on Electronic Perturbation. Organic Letters, 2007, 9, 5303-5306.	2.4	27
82	Photocatalytic hydrogen generation using a protein-coated photosensitizer with anionic patches and a monocationic electron mediator. Chemical Communications, 2008, , 3684.	2.2	27
83	Thermodynamically controlled supramolecular polymerization of cytochrome b₅₆₂. Biopolymers, 2009, 91, 194-200.	1.2	26
84	A Pyreneâ€Linked Cavity within a Î²â€Barrel Protein Promotes an Asymmetric Dielsâ€“Alder Reaction. Angewandte Chemie - International Edition, 2017, 56, 13618-13622.	7.2	26
85	Interdomain flip-flop motion visualized in flavocytochrome cellobiose dehydrogenase using high-speed atomic force microscopy during catalysis. Chemical Science, 2017, 8, 6561-6565.	3.7	26
86	Thermally Controlled Construction of Feâ€“N_x Active Sites on the Edge of a Graphene Nanoribbon for an Electrocatalytic Oxygen Reduction Reaction. ACS Applied Materials & Interfaces, 2021, 13, 15101-15112.	4.0	25
87	Introduction of a specific binding domain on myoglobin surface by new chemical modification. Journal of Inorganic Biochemistry, 2000, 82, 133-139.	1.5	24
88	Ortho lithiation directed by amino groups on silicon in phenylsilane derivatives. Tetrahedron Letters, 1990, 31, 2925-2928.	0.7	23
89	Notable temperature effect on the stereoselectivity in the photochemical [2+2] cycloaddition reaction (PaternÃ²â€“BÃ¼chi reaction) of 2,3-dihydrofuran-3-ol derivatives with benzophenone. Tetrahedron Letters, 2006, 47, 2527-2530.	0.7	23
90	Effect of peripheral trifluoromethyl groups in artificial iron porphycene cofactor on ligand binding properties of myoglobin. Journal of Inorganic Biochemistry, 2008, 102, 166-173.	1.5	23

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91	Investigation of Aromaticity and Photophysical Properties in [18]/[20]Ï€ Porphycene Derivatives. Chemistry - A European Journal, 2011, 17, 7882-7889.	1.7	23
92	Redox Potentials of Cobalt Corrinoids with Axial Ligands Correlate with Heterolytic Coâ€“C Bond Dissociation Energies. Inorganic Chemistry, 2017, 56, 1950-1955.	1.9	22
93	Myoglobin Reconstituted with Ni Tetradehydrocorrin as a Methaneâ€Generating Model of Methylâ€coenzyme M Reductase. Angewandte Chemie - International Edition, 2019, 58, 13813-13817.	7.2	22
94	DNAâ€Mediated Protein Shuttling between Coacervateâ€Based Artificial Cells. Angewandte Chemie - International Edition, 2022, 61, .	7.2	22
95	New approach to the construction of an artificial hemoprotein complex. Coordination Chemistry Reviews, 1999, 190-192, 961-974.	9.5	20
96	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
97	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
98	Photoinduced electron transfer from zinc porphyrin to a linked quinone in myoglobin. Journal of the Chemical Society Chemical Communications, 1995, , 2503.	2.0	19
99	Enzymeâ€“substrate complex structures of CYP154C5 shed light on its mode of highly selective steroid hydroxylation. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 2875-2889.	2.5	19
100	Mitochondriaâ€Targeting Polyamineâ€“Protoporphyrin Conjugates for Photodynamic Therapy. ChemMedChem, 2018, 13, 15-19.	1.6	19
101	Light triggers molecular shuttling in rotaxanes: control over proximity and charge recombination. Chemical Science, 2019, 10, 3846-3853.	3.7	19
102	Kinetic and Thermodynamic Analysis of Induced-Fit Molecular Recognition between Tetraarylporphyrin and Ubiquinone Analogues. Chemistry - A European Journal, 1998, 4, 1266-1274.	1.7	18
103	Thermal Isomerization of N-Bridged Cobalt Corrole Complexes through a Transiently Formed Axial Carbenoid. Organometallics, 2011, 30, 1869-1873.	1.1	18
104	Photoinduced Electron Transfer of ZnSâ€“AgInS2 Solid-Solution Semiconductor Nanoparticles: Emission Quenching and Photocatalytic Reactions Controlled by Electrostatic Forces. Journal of Physical Chemistry C, 2013, 117, 15667-15676.	1.5	18
105	Pathway of Information Transmission from Heme to Protein upon Ligand Binding/Dissociation in Myoglobin Revealed by UV Resonance Raman Spectroscopy. Journal of Biological Chemistry, 2006, 281, 24637-24646.	1.6	17
106	A supramolecular assembly based on an engineered hemoprotein exhibiting a thermal stimulus-driven conversion to a new distinct supramolecular structure. Chemical Communications, 2017, 53, 6879-6882.	2.2	17
107	Nonpreciousâ€metal Fe/N/C Catalysts Prepared from Ï€â€Expanded Fe Salen Precursors toward an Efficient Oxygen Reduction Reaction. ChemCatChem, 2018, 10, 743-750.	1.8	17
108	Electrochemical CO₂ reduction by a cobalt bipyricorrole complex: decrease of an overpotential value derived from monoanionic ligand character of the porphyrinoid species. Chemical Communications, 2019, 55, 493-496.	2.2	17

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109	Enhancement of Peroxygenase Activity of Horse Heart Myoglobin by Modification of Heme-propionate Side Chains. Chemistry Letters, 2003, 32, 496-497.	0.7	16
110	Crystal Structures and Coordination Behavior of Aqua- and Cyano-Co(III) Tetradehydrocorrins in the Heme Pocket of Myoglobin. Inorganic Chemistry, 2016, 55, 1287-1295.	1.9	16
111	Olefin metathesis catalysts embedded in Î²-barrel proteins: creating artificial metalloproteins for olefin metathesis. Beilstein Journal of Organic Chemistry, 2018, 14, 2861-2871.	1.3	16
112	Site-Specific Modification of Proteins through N-Terminal Azide Labeling and a Chelation-Assisted CuAAC Reaction. Bioconjugate Chemistry, 2019, 30, 2427-2434.	1.8	16
113	Synthesis of Ring-Fluorinated Porphyrins and Reconstitutional Myoglobins with Their Iron Complexes. Bulletin of the Chemical Society of Japan, 1996, 69, 2923-2933.	2.0	15
114	CuAAC in a Distal Pocket: Metal Activeâ€Template Synthesis of Strappedâ€Porphyrin [2]Rotaxanes. Chemistry - A European Journal, 2017, 23, 13579-13582.	1.7	15
115	Bimetallic M/N/C catalysts prepared from Ï€-expanded metal salen precursors toward an efficient oxygen reduction reaction. RSC Advances, 2018, 8, 2892-2899.	1.7	15
116	Roles of N- and C-terminal domains in the ligand-binding properties of cytoglobin. Journal of Inorganic Biochemistry, 2018, 179, 1-9.	1.5	15
117	Triazolecarbaldehyde Reagents for Oneâ€Step Nâ€Terminal Protein Modification. ChemBioChem, 2020, 21, 1274-1278.	1.3	15
118	Photocatalytic Properties of TiO₂ Composites Immobilized with Gold Nanoparticle Assemblies Using the Streptavidinâ€“Biotin Interaction. Langmuir, 2016, 32, 6459-6467.	1.6	14
119	Carbene insertion into oxygenî—¸hydrogen bonds by metalloporphyrin catalysts. Journal of Organometallic Chemistry, 1994, 473, 323-327.	0.8	13
120	Photochemical properties of a myoglobinâ€“CdTe quantum dot conjugate. Chemical Communications, 2012, 48, 8054.	2.2	13
121	Synthesis and Characterization of meso-Substituted Cobalt Tetradehydrocorrin and Evaluation of Its Electrocatalytic Behavior Toward CO₂ Reduction and H₂ Evolution. Inorganic Chemistry, 2018, 57, 14644-14652.	1.9	13
122	Methane generation via intraprotein Câ€“S bond cleavage in cytochrome b562 reconstituted with nickel didehydrocorrin. Journal of Organometallic Chemistry, 2019, 901, 120945.	0.8	13
123	A ring-shaped hemoprotein trimer thermodynamically controlled by the supramolecular hemeâ€“heme pocket interaction. Chemical Communications, 2019, 55, 1544-1547.	2.2	13
124	Methane Generation and Reductive Debromination of Benzylic Position by Reconstituted Myoglobin Containing Nickel Tetradehydrocorrin as a Model of Methyl-coenzyme M Reductase. Inorganic Chemistry, 2020, 59, 11995-12004.	1.9	13
125	Functionalization of Myoglobin. Progress in Inorganic Chemistry, 2005, , 449-493.	3.0	12
126	Construction of glycosylated myoglobin by reconstitutional method. Chemical Communications, 2006, , 3131.	2.2	12

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127	Cathodic photocurrent generation from zinc-substituted cytochrome b562 assemblies immobilized on an apocytochrome b562-modified gold electrode. Dalton Transactions, 2013, 42, 16102.	1.6	12
128	Incorporation of a Cp*Rh(III)-dithiophosphate Cofactor with Latent Activity into a Protein Scaffold Generates a Biohybrid Catalyst Promoting C(sp²)â€“H Bond Functionalization. Inorganic Chemistry, 2020, 59, 14457-14463.	1.9	12
129	An efficient oxidative cleavage of carbon-silicon bonds by a dioxygen/hydroquinone system. Tetrahedron Letters, 1989, 30, 6533-6536.	0.7	11
130	A Matrix Isolation Study of 2-Isopropylidenecyclopentane-1,3-diyl (Berson-Type Diradical). Journal of Organic Chemistry, 2006, 71, 6607-6610.	1.7	11
131	Organic/inorganic hybrid nanomaterials with vitamin B12functions. Science and Technology of Advanced Materials, 2006, 7, 655-661.	2.8	11
132	Substrate binding induces structural changes in cytochrome P450cam. Acta Crystallographica Section F: Structural Biology Communications, 2009, 65, 80-83.	0.7	11
133	Fibrous Supramolecular Hemoprotein Assemblies Connected with Synthetic Heme Dimer and Apohemoprotein Dimer. Chemistry and Biodiversity, 2012, 9, 1684-1692.	1.0	11
134	Successive energy transfer within multiple photosensitizers assembled in a hexameric hemoprotein scaffold. Physical Chemistry Chemical Physics, 2018, 20, 3200-3209.	1.3	11
135	Focusing on a nickel hydrocorphinoid in a protein matrix: methane generation by methyl-coenzyme M reductase with F430 cofactor and its models. Chemical Society Reviews, 2022, 51, 1629-1639.	18.7	11
136	Oxidative cleavage of carbonâ€“silicon bonds by dioxygen: catalysis by a flavinâ€“dihydronicotinamide redox system. Journal of the Chemical Society Chemical Communications, 1988, , 795-797.	2.0	10
137	Preparation and Binding Affinity of New Porphyrin Host Molecule for Ubiquinone Analogues. Chemistry Letters, 1994, 23, 1749-1752.	0.7	10
138	Interfacial Recognition between Reconstituted Myoglobin Having Charged Binding Domain and Electron Acceptor via Electrostatic Interaction. Chemistry Letters, 1998, 27, 1229-1230.	0.7	10
139	Chemical Properties of Sperm Whale Myoglobins Reconstituted with Monopropionate Hemins. Chemistry Letters, 2004, 33, 1512-1513.	0.7	10
140	Crystal Structure, Exogenous Ligand Binding, and Redox Properties of an Engineered Diiron Active Site in a Bacterial Hemerythrin. Inorganic Chemistry, 2013, 52, 13014-13020.	1.9	10
141	Oxygenâ€binding Protein Fiber and Microgel: Supramolecular Myoglobinâ€“Poly(acrylate) Conjugates. Chemistry - an Asian Journal, 2016, 11, 1036-1042.	1.7	10
142	A Heterogeneous Hydrogenâ€Evolution Catalyst Based on a Mesoporous Organosilica with a Diiron Catalytic Center Modelling [FeFe]â€Hydrogenase. ChemCatChem, 2018, 10, 4894-4899.	1.8	10
143	Directed Evolution of a Cp*Rh^{III}â€Linked Biohybrid Catalyst Based on a Screening Platform with Affinity Purification. ChemBioChem, 2021, 22, 679-685.	1.3	10
144	Solvent effects on thermodynamic parameters for porphyrinâ€“quinone interaction through multiple hydrogen bonding. Chemical Communications, 1997, , 1865.	2.2	9

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145	Structure and reactivity of reconstituted myoglobins: interaction between protein and polar side chain of chemically modified hemin. Inorganica Chimica Acta, 1998, 275-276, 159-167.	1.2	9
146	Isolable Iron(II)â€“Porphycene Derivative Stabilized by Introduction of Trifluoromethyl Groups on the Ligand Framework. Bulletin of the Chemical Society of Japan, 2008, 81, 76-83.	2.0	9
147	Electron transfer and oxidase activities in reconstituted hemoproteins with chemically modified cofactors. Journal of Porphyrins and Phthalocyanines, 2009, 13, 1082-1089.	0.4	9
148	Preparation and reactivity of a tetranuclear Fe(II) core in the metallothionein Î±-domain. Journal of Inorganic Biochemistry, 2011, 105, 702-708.	1.5	9
149	Supramolecular Linear Assemblies of Cytochrome b 562 Immobilized on a Gold Electrode. Journal of Inorganic and Organometallic Polymers and Materials, 2013, 23, 172-179.	1.9	9
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