Michael P Hendrich

List of Publications by Year
in descending order

94 papers	5,793 citations	61984 43 h-index	74163 75 g-index
99 all docs	99 docs citations	99 times ranked	4718 citing authors

#	Article	IF	Citations
1	O2 Activation by Nonheme Iron Complexes: A Monomeric Fe(III)-Oxo Complex Derived From O2. Science, 2000, 289, 938-941.	12.6	423
2	Reversible Switching of Magnetism in Thiolate-Protected Au₂₅ Superatoms. Journal of the American Chemical Society, 2009, 131, 2490-2492.	13.7	414
3	A High-Valent Nonheme Iron Intermediate. Structure and Properties of [Fe2(.mu.-O)2(5-Me-TPA)2](ClO4)3. Journal of the American Chemical Society, 1995, 117, 2778-2792.	13.7	238
4	Formation, Structure, and EPR Detection of a High Spin Fe^{IV}â€"Oxo Species Derived from Either an Fe^{III}â€"Oxo or Fe^{III}â€"OH Complex. Journal of the American Chemical Society, 2010, 132, 12188-12190.	13.7	218
5	Moessbauer, EPR, and ENDOR studies of the hydroxylase and reductase components of methane monooxygenase from Methylosinus trichosporium OB3b. Journal of the American Chemical Society, 1993, 115, 3688-3701.	13.7	185
6	High-valent transition metal chemistry. Moessbauer and EPR studies of high-spin (S = 2) iron(IV) and intermediate-spin (S = 3/2) iron(III) complexes with a macrocyclic tetraamido-N ligand. Journal of the American Chemical Society, 1993, 115, 6746-6757.	13.7	178
7	Utilization of Hydrogen Bonds To Stabilize Mâˆ'O(H) Units:â€‰ Synthesis and Properties of Monomeric Iron and Manganese Complexes with Terminal Oxo and Hydroxo Ligands. Journal of the American Chemical Society, 2004, 126, 2556-2567.	13.7	173
8	On the feasibility of N2 fixation via a single-site FeI/FeIV cycle: Spectroscopic studies of FeI(N2)FeI, FeIVN, and related species. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17107-17112.	7.1	170
9	Formation of a Room Temperature Stable Fe^V(O) Complex: Reactivity Toward Unactivated Câ€"H Bonds. Journal of the American Chemical Society, 2014, 136, 9524-9527.	13.7	150
10	Integer-spin EPR studies of the fully reduced methane monooxygenase hydroxylase component. Journal of the American Chemical Society, 1990, 112, 5861-5865.	13.7	145
11	Trapping and spectroscopic characterization of an Fe ^{III} -superoxo intermediate from a nonheme mononuclear iron-containing enzyme. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16788-16793.	7.1	141
12	Preparation and Properties of a Monomeric MnIVâˆ'Oxo Complex. Journal of the American Chemical Society, 2006, 128, 8728-8729.	13.7	138
13	Moessbauer and integer-spin EPR of the oxidized P-clusters of nitrogenase: POX is a non-Kramers system with a nearly degenerate ground doublet. Journal of the American Chemical Society, 1992, 114, 8579-8590.	13.7	132
14	Manganese(II)-Dependent Extradiol-Cleaving Catechol Dioxygenase fromArthrobacter globiformisCM-2â€. Biochemistry, 1996, 35, 160-170.	2.5	130
15	High-spin Mnâ€"oxo complexes and their relevance to the oxygen-evolving complex within photosystem II. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5319-5324.	7.1	123
16	Preparation and Properties of a Monomeric High-Spin Mn^Vâ€"Oxo Complex. Journal of the American Chemical Society, 2012, 134, 1996-1999.	13.7	115
17	Quantitative analysis of dinuclear manganese(II) EPR spectra. Journal of Magnetic Resonance, 2003, 165, 33-48.	2.1	103
18	Metal Binding Studies and EPR Spectroscopy of the Manganese Transport Regulator MntRâ€. Biochemistry, 2006, 45, 15359-15372.	2.5	96

#	ARTICLE	IF	CITATIONS
19	Formation of Fe(III)Fe(IV) Species from the Reaction between a Diiron(II) Complex and Dioxygen:â€‰ Relevance to Ribonucleotide Reductase Intermediate X. Journal of the American Chemical Society, 1999, 121, 9893-9894.	13.7	87
20	Nitrosocyanin, a Red Cupredoxin-like Protein fromNitrosomonas europaeaâ€. Biochemistry, 2002, 41, 1703-1709.	2.5	85
21	Understanding the Mechanism of H+-Induced Demetalation as a Design Strategy for Robust Iron(III) Peroxide-Activating Catalysts. Journal of the American Chemical Society, 2003, 125, 12378-12379.	13.7	80
22	Electron Paramagnetic Resonance Detection of Intermediates in the Enzymatic Cycle of an Extradiol Dioxygenase. Journal of the American Chemical Society, 2008, 130, 14465-14467.	13.7	77
23	Structure and Magnetic Properties of Trigonal Bipyramidal Iron Nitrosyl Complexes. Inorganic Chemistry, 1999, 38, 3110-3115.	4.0	75
24	Valence-Delocalized Diiron(II,III) Cores Supported by Carboxylate-Only Bridging Ligands. Journal of the American Chemical Society, 2000, 122, 5000-5001.	13.7	67
25	Electron Paramagnetic Resonance and MÃ¶ssbauer Spectroscopy and Density Functional Theory Analysis of a High-Spin Fe^{IV}â€“Oxo Complex. Journal of the American Chemical Society, 2012, 134, 9775-9784.	13.7	67
26	The Nitric Oxide Reductase Mechanism of a Flavo-Diiron Protein: Identification of Active-Site Intermediates and Products. Journal of the American Chemical Society, 2014, 136, 7981-7992.	13.7	67
27	NO Reductase Activity of the Tetraheme Cytochromec554ofNitrosomonas europaea. Journal of the American Chemical Society, 2006, 128, 4330-4337.	13.7	58
28	Functional Mimic of Dioxygen-Activating Centers in Non-Heme Diiron Enzymes:Â Mechanistic Implications of Paramagnetic Intermediates in the Reactions between Diiron(II) Complexes and Dioxygen. Journal of the American Chemical Society, 2002, 124, 3993-4007.	13.7	57
29	[17] Combining MÃ¶ssbauer spectroscopy with integer spin electron paramagnetic resonance. Methods in Enzymology, 1993, 227, 463-479.	1.0	56
30	Mechanistic Implications for the Formation of the Diiron Cluster in Ribonucleotide Reductase Provided by Quantitative EPR Spectroscopy. Journal of the American Chemical Society, 2003, 125, 8748-8759.	13.7	56
31	Hemeâ^'Heme Interactions in the Cytochromeb6fComplex:Â EPR Spectroscopy and Correlation with Structure. Journal of the American Chemical Society, 2006, 128, 14246-14247.	13.7	56
32	Multifield saturation magnetization and multifrequency EPR measurements of deoxyhemerythrin azide. A unified picture. Journal of the American Chemical Society, 1991, 113, 3039-3044.	13.7	55
33	Quantitative Interpretation of Multifrequency Multimode EPR Spectra of Metal Containing Proteins, Enzymes, and Biomimetic Complexes. Methods in Enzymology, 2015, 563, 171-208.	1.0	55
34	Effects of Noncovalent Interactions on High-Spin Fe(IV)â€“Oxido Complexes. Journal of the American Chemical Society, 2020, 142, 11804-11817.	13.7	53
35	The Active Site of Hydroxylamine Oxidoreductase from Nitrosomonas: Evidence for a New Metal Cluster in Enzymes. Journal of the American Chemical Society, 1994, 116, 11961-11968.	13.7	51
36	Spectroscopic and Reactivity Comparisons of a Pair of bTAML Complexes with Fe^Vâ•O and Fe^{IV}â•O Units. Inorganic Chemistry, 2017, 56, 6352-6361.	4.0	51

#	Article	IF	Citations
37	Correlations of Structure and Electronic Properties from EPR Spectroscopy of Hydroxylamine Oxidoreductase. Journal of the American Chemical Society, 2001, 123, 2997-3005.	13.7	50
38	Spectroscopic Evidence for Ca2+Involvement in the Assembly of the Mn4Ca Cluster in the Photosynthetic Water-Oxidizing Complexâ€. Biochemistry, 2006, 45, 12876-12889.	2.5	50
39	Characterization of Monomeric Mn^{II/III/IV}â€“Hydroxo Complexes from X- and Q-Band Dual Mode Electron Paramagnetic Resonance (EPR) Spectroscopy. Inorganic Chemistry, 2013, 52, 12568-12575.	4.0	49
40	Oxy Intermediates of Homoprotocatechuate 2,3-Dioxygenase: Facile Electron Transfer between Substrates. Biochemistry, 2011, 50, 10262-10274.	2.5	48
41	Synthesis and Structure of a Trigonal Monopyramidal Fe(II) Complex and Its Paramagnetic Carbon Monoxide Derivative. Journal of the American Chemical Society, 1996, 118, 6084-6085.	13.7	47
42	Spectroscopic Characterization and Assignment of Reduction Potentials in the Tetraheme Cytochrome c554fromNitrosomonasEuropaea. Journal of the American Chemical Society, 2003, 125, 1738-1747.	13.7	45
43	Reactivity of an Fe^{IV}-Oxo Complex with Protons and Oxidants. Journal of the American Chemical Society, 2016, 138, 13143-13146.	13.7	45
44	Enzyme Reactivation by Hydrogen Peroxide in Heme-based Tryptophan Dioxygenase. Journal of Biological Chemistry, 2011, 286, 26541-26554.	3.4	42
45	NaClO-Generated Iron(IV)oxo and Iron(V)oxo TAMLs in Pure Water. Journal of the American Chemical Society, 2016, 138, 13866-13869.	13.7	42
46	Spectroscopic Characterization of the NO Adduct of Hydroxylamine Oxidoreductase. Biochemistry, 2002, 41, 4603-4611.	2.5	39
47	A Diferrous-Dinitrosyl Intermediate in the N₂O-Generating Pathway of a Deflavinated Flavo-Diiron Protein. Biochemistry, 2014, 53, 5631-5637.	2.5	39
48	The Diheme Cytochrome <i>c</i> Peroxidase from <i>Shewanella oneidensis</i> Requires Reductive Activation. Biochemistry, 2012, 51, 974-985.	2.5	38
49	Structural and Spectroscopic Properties of Antiferromagnetically Coupled FeIIIMnII and FeIIMnII Complexes. Inorganic Chemistry, 1995, 34, 134-139.	4.0	36
50	Preparation and properties of an Mn^{IV}â€“hydroxide complex: proton and electron transfer at a mononuclear manganese site and its relationship to the oxygen evolving complex within photosystem II. Chemical Science, 2014, 5, 3064-3071.	7.4	36
51	Controlling magnetism of Au₁₃₃(TBBT)₅₂ nanoclusters at single electron level and implication for nonmetal to metal transition. Chemical Science, 2019, 10, 9684-9691.	7.4	35
52	Ground-State Electronic Structures of Binuclear Iron(II) Sites: Experimental Protocol and a Consistent Description of Moessbauer, EPR, and Magnetization Measurements of the Bis(phenolate)-Bridged Complex [Fe2(salmp)2]2-. Inorganic Chemistry, 1994, 33, 2848-2856.	4.0	32
53	MÃ¶ssbauer, EPR, and MCD studies of the C9S and C42S variants of Clostridium pasteurianum rubredoxin and MCD studies of the wild-type protein. Journal of Biological Inorganic Chemistry, 2000, 5, 475-487.	2.6	32
54	Spectroscopy and DFT Calculations of a Flavo-diiron Enzyme Implicate New Diiron Site Structures. Journal of the American Chemical Society, 2017, 139, 12009-12019.	13.7	32

#	Article	IF	Citations
55	Unsymmetrical Bimetallic Complexes with M^{II}â€“(Î¼-OH)â€“M^{III} Cores (M^{II}M^{III} = Fe^{II}Fe^{III}, Mn^{II}Fe^{III},) Tj ETQq1 1 0.784314 rgBT 2013, 52, 10229-10231.	4.0	31
56	Bioinspired, Multidisciplinary, Iterative Catalyst Design Creates the Highest Performance Peroxidase Mimics and the Field of Sustainable Ultradilute Oxidation Catalysis (SUDOC). ACS Catalysis, 2019, 9, 7023-7037.	11.2	29
57	Activation of Dioxygen by a TAML Activator in Reverse Micelles: Characterization of an Fe^{III}Fe^{IV} Dimer and Associated Catalytic Chemistry. Journal of the American Chemical Society, 2015, 137, 9704-9715.	13.7	28
58	Membrane Tetraheme Cytochrome <i>c</i>_{m552} of the Ammonia-Oxidizing <i>Nitrosomonas europaea</i>: A Ubiquinone Reductase. Biochemistry, 2008, 47, 6539-6551.	2.5	25
59	Tuning the Reactivity of Fe^V(O) toward Câ€“H Bonds at Room Temperature: Effect of Water. Inorganic Chemistry, 2015, 54, 1535-1542.	4.0	24
60	Structure and Spectroscopy of Alkene-Cleaving Dioxygenases Containing an Atypically Coordinated Non-Heme Iron Center. Biochemistry, 2017, 56, 2836-2852.	2.5	23
61	MÃ¶ssbauer, Electron Paramagnetic Resonance, and Density Functional Theory Studies of Synthetic <i>S</i> = ¹/₂ Fe^{III}â^'Oâ^'Fe^{IV}â•O Complexes. Superexchange-Mediated Spin Transition at the Fe^{IV}â•O Site. Inorganic Chemistry, 2010, 49, 8310-8322.	4.0	22
62	Modular Artificial Cupredoxins. Journal of the American Chemical Society, 2016, 138, 9073-9076.	13.7	22
63	Doping Effect on the Magnetism of Thiolate-Capped 25-Atom Alloy Nanoclusters. Chemistry of Materials, 2020, 32, 9238-9244.	6.7	22
64	Correlation of Optical and EPR Signals with the P460 Heme of Hydroxylamine Oxidoreductase fromNitrosomonas europaeaâ€. Biochemistry, 1998, 37, 523-529.	2.5	20
65	EPR and MÃ¶ssbauer Spectroscopy Show Inequivalent Hemes in Tryptophan Dioxygenase. Journal of the American Chemical Society, 2010, 132, 1098-1109.	13.7	20
66	Spectroscopy and DFT Calculations of Flavoâ€“Diiron Nitric Oxide Reductase Identify Bridging Structures of NO-Coordinated Diiron Intermediates. ACS Catalysis, 2018, 8, 11704-11715.	11.2	20
67	A widely distributed diheme enzyme from Burkholderia that displays an atypically stable bis-Fe(IV) state. Nature Communications, 2019, 10, 1101.	12.8	20
68	Carboxylatoiron(II) Aggregates: A Novel Fe4II Complex with Threefold Symmetry. Angewandte Chemie International Edition in English, 1994, 33, 1660-1662.	4.4	17
69	EPR spectroscopy and catalase activity of manganese-bound DNA-binding protein from nutrient starved cells. Journal of Biological Inorganic Chemistry, 2010, 15, 729-736.	2.6	17
70	Models for Unsymmetrical Active Sites in Metalloproteins: Structural, Redox, and Magnetic Properties of Bimetallic Complexes with M^{II}-(Î¼-OH)-Fe^{III}Cores. Inorganic Chemistry, 2017, 56, 14118-14128.	4.0	17
71	Tuning the Copper(II)/Copper(I) Redox Potential for More Robust Copperâ€Catalyzed Câ€“N Bond Forming Reactions. European Journal of Inorganic Chemistry, 2020, 2020, 1278-1285.	2.0	16
72	Correlations between Magnetism and Structure in Dinuclear CuIIFeIII Complexes with Integer Spin EPR Signals. Angewandte Chemie International Edition in English, 1990, 29, 921-923.	4.4	15

#	Article	IF	Citations
73	A â€œBeheadedâ€•TAML Activator: A Compromised Catalyst that Emphasizes the Linearity between Catalytic Activity and p<i>K</i>_a. Inorganic Chemistry, 2016, 55, 12263-12269.	4.0	14
74	Manganeseâ€“Hydroxido Complexes Supported by a Urea/Phosphinic Amide Tripodal Ligand. Inorganic Chemistry, 2018, 57, 13341-13350.	4.0	14
75	A Synthetically Generated LFe^{IV}OH_{<i>n</i>} Complex. Inorganic Chemistry, 2019, 58, 2099-2108.	4.0	12
76	Probing Hydrogen Bonding Interactions to Ironâ€Oxido/Hydroxido Units by ⁵⁷Fe Nuclear Resonance Vibrational Spectroscopy. Angewandte Chemie - International Edition, 2018, 57, 16010-16014.	13.8	11
77	Outer-Sphere Tyrosine 159 within the 3-Mercaptopropionic Acid Dioxygenase S-H-Y Motif Gates Substrate-Coordination Denticity at the Non-Heme Iron Active Site. Biochemistry, 2019, 58, 5135-5150.	2.5	11
78	The Catalytic Role of a Conserved Tyrosine in Nitric Oxide-Reducing Non-heme Diiron Enzymes. ACS Catalysis, 2020, 10, 8177-8186.	11.2	11
79	Mononuclear complexes of a tridentate redox-active ligand with sulfonamido groups: structure, properties, and reactivity. Chemical Science, 2018, 9, 6540-6547.	7.4	10
80	Kinetic and Spectroscopic Characterization of the Catalytic Ternary Complex of Tryptophan 2,3-Dioxygenase. Biochemistry, 2020, 59, 2813-2822.	2.5	10
81	Electronic State of the His/Tyr-Ligated Heme of BthA by MÃ¶ssbauer and DFT Analysis. Inorganic Chemistry, 2020, 59, 10223-10233.	4.0	10
82	Artificial Metalloproteins with Dinuclear Ironâ€“Hydroxido Centers. Journal of the American Chemical Society, 2021, 143, 2384-2393.	13.7	10
83	NO binding to Mn-substituted homoprotocatechuate 2,3-dioxygenase: relationship to O2 reactivity. Journal of Biological Inorganic Chemistry, 2013, 18, 717-728.	2.6	7
84	Bioinspired Di-Fe Complexes: Correlating Structure and Proton Transfer over Four Oxidation States. Journal of the American Chemical Society, 2022, 144, 4559-4571.	13.7	7
85	Cytochrome <i>c</i>â€²_{Î²-Met} Is a Variant in the P460 Superfamily Lacking the Hemeâ€“Lysyl Cross-Link: A Peroxidase Mimic Generating a Ferryl Intermediate. Biochemistry, 2020, 59, 704-716.	2.5	4
86	3. Quantitative interpretation of EPR spectroscopy with applications for iron-sulfur proteins. , 2014, , 21-48.		3
87	Bis phenylene flattened 13-membered tetraamide macrocyclic ligand (TAML) for square planar cobalt(III). Journal of Coordination Chemistry, 2018, 71, 1822-1836.	2.2	3
88	Stepwise assembly of heterobimetallic complexes: synthesis, structure, and physical properties. Dalton Transactions, 2021, 50, 8111-8119.	3.3	3
89	Analysis of the Puzzling Exchange-Coupling Constants in a Series of Heterobimetallic Complexes. Inorganic Chemistry, 2019, 58, 9150-9160.	4.0	2
90	Carboxylatoeisen(<scp>II</scp>)â€Aggregate: ein neuer Feâ€Komplex mit dreizÃhliger Symmetrie. Angewandte Chemie, 1994, 106, 1730-1733.	2.0	1

#	Article	IF	Citations
91	A Stable Ferryl Porphyrin at the Active Site of Y463M BthA. Journal of the American Chemical Society, 2020, 142, 11978-11982.	13.7	1
92	5. Quantitative interpretation of EPR spectroscopy with applications for iron-sulfur proteins. , 2017, , 135-162.		0
93	Probing Hydrogen Bonding Interactions to Ironâ€Oxido/Hydroxido Units by 57 Fe Nuclear Resonance Vibrational Spectroscopy. Angewandte Chemie, 2018, 130, 16242-16246.	2.0	0
94	RÃ¼cktitelbild: Probing Hydrogen Bonding Interactions to Ironâ€Oxido/Hydroxido Units by ⁵⁷Fe Nuclear Resonance Vibrational Spectroscopy (Angew. Chem. 49/2018). Angewandte Chemie, 2018, 130, 16470-16470.	2.0	0