# Michael P Hendrich

List of Publications by Year
in descending order



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

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 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 |
| 2 | Stepwise assembly of heterobimetallic complexes: synthesis, structure, and physical properties. Dalton Transactions, 2021, 50, 8111-8119. | 3.3 | 3 |
| 3 | Artificial Metalloproteins with Dinuclear Ironâ€“Hydroxido Centers. Journal of the American Chemical Society, 2021, 143, 2384-2393. | 13.7 | 10 |
| 4 | Cytochrome <i>c</i>â€²<sub>Î²-Met</sub> 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 |
| 5 | Doping Effect on the Magnetism of Thiolate-Capped 25-Atom Alloy Nanoclusters. Chemistry of Materials, 2020, 32, 9238-9244. | 6.7 | 22 |
| 6 | Kinetic and Spectroscopic Characterization of the Catalytic Ternary Complex of Tryptophan 2,3-Dioxygenase. Biochemistry, 2020, 59, 2813-2822. | 2.5 | 10 |
| 7 | 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 |
| 8 | A Stable Ferryl Porphyrin at the Active Site of Y463M BthA. Journal of the American Chemical Society, 2020, 142, 11978-11982. | 13.7 | 1 |
| 9 | The Catalytic Role of a Conserved Tyrosine in Nitric Oxide-Reducing Non-heme Diiron Enzymes. ACS Catalysis, 2020, 10, 8177-8186. | 11.2 | 11 |
| 10 | 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 |
| 11 | 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 |
| 12 | 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 |
| 13 | Controlling magnetism of Au<sub>133</sub>(TBBT)<sub>52</sub> nanoclusters at single electron level and implication for nonmetal to metal transition. Chemical Science, 2019, 10, 9684-9691. | 7.4 | 35 |
| 14 | A Synthetically Generated LFe<sup>IV</sup>OH<sub><i>n</i></sub> Complex. Inorganic Chemistry, 2019, 58, 2099-2108. | 4.0 | 12 |
| 15 | Analysis of the Puzzling Exchange-Coupling Constants in a Series of Heterobimetallic Complexes. Inorganic Chemistry, 2019, 58, 9150-9160. | 4.0 | 2 |
| 16 | A widely distributed diheme enzyme from Burkholderia that displays an atypically stable bis-Fe(IV) state. Nature Communications, 2019, 10, 1101. | 12.8 | 20 |
| 17 | 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 |
| 18 | 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 |

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|---|---|---|---|
| 19 | RÃ¼cktitelbild: Probing Hydrogen Bonding Interactions to Ironâ€Oxido/Hydroxido Units by <sup>57</sup>Fe Nuclear Resonance Vibrational Spectroscopy (Angew. Chem. 49/2018). Angewandte Chemie, 2018, 130, 16470-16470. | 2.0 | 0 |
| 20 | Manganeseâ€“Hydroxido Complexes Supported by a Urea/Phosphinic Amide Tripodal Ligand. Inorganic Chemistry, 2018, 57, 13341-13350. | 4.0 | 14 |
| 21 | Probing Hydrogen Bonding Interactions to Ironâ€Oxido/Hydroxido Units by <sup>57</sup>Fe Nuclear Resonance Vibrational Spectroscopy. Angewandte Chemie - International Edition, 2018, 57, 16010-16014. | 13.8 | 11 |
| 22 | 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 |
| 23 | Mononuclear complexes of a tridentate redox-active ligand with sulfonamido groups: structure, properties, and reactivity. Chemical Science, 2018, 9, 6540-6547. | 7.4 | 10 |
| 24 | 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 |
| 25 | Structure and Spectroscopy of Alkene-Cleaving Dioxygenases Containing an Atypically Coordinated Non-Heme Iron Center. Biochemistry, 2017, 56, 2836-2852. | 2.5 | 23 |
| 26 | Spectroscopic and Reactivity Comparisons of a Pair of bTAML Complexes with Fe<sup>V</sup>â•O and Fe<sup>IV</sup>â•O Units. Inorganic Chemistry, 2017, 56, 6352-6361. | 4.0 | 51 |
| 27 | 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 |
| 28 | Models for Unsymmetrical Active Sites in Metalloproteins: Structural, Redox, and Magnetic Properties of Bimetallic Complexes with M<sup>II</sup>-(Î¼-OH)-Fe<sup>III</sup>Cores. Inorganic Chemistry, 2017, 56, 14118-14128. | 4.0 | 17 |
| 29 | 5. Quantitative interpretation of EPR spectroscopy with applications for iron-sulfur proteins. , 2017, , 135-162. | | 0 |
| 30 | Modular Artificial Cupredoxins. Journal of the American Chemical Society, 2016, 138, 9073-9076. | 13.7 | 22 |
| 31 | 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 |
| 32 | Reactivity of an Fe<sup>IV</sup>-Oxo Complex with Protons and Oxidants. Journal of the American Chemical Society, 2016, 138, 13143-13146. | 13.7 | 45 |
| 33 | A â€œBeheadedâ€• TAML Activator: A Compromised Catalyst that Emphasizes the Linearity between Catalytic Activity and p<i>K</i><sub>a</sub>. Inorganic Chemistry, 2016, 55, 12263-12269. | 4.0 | 14 |
| 34 | Tuning the Reactivity of Fe<sup>V</sup>(O) toward Câ€“H Bonds at Room Temperature: Effect of Water. Inorganic Chemistry, 2015, 54, 1535-1542. | 4.0 | 24 |
| 35 | 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 |
| 36 | Activation of Dioxygen by a TAML Activator in Reverse Micelles: Characterization of an Fe<sup>III</sup>Fe<sup>IV</sup> Dimer and Associated Catalytic Chemistry. Journal of the American Chemical Society, 2015, 137, 9704-9715. | 13.7 | 28 |

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| 37 | 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 |
| 38 | 3. Quantitative interpretation of EPR spectroscopy with applications for iron-sulfur proteins. , 2014, , 21-48. | | 3 |
| 39 | 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 |
| 40 | Formation of a Room Temperature Stable Fe<sup>V</sup>(O) Complex: Reactivity Toward Unactivated Câ€“H Bonds. Journal of the American Chemical Society, 2014, 136, 9524-9527. | 13.7 | 150 |
| 41 | Preparation and properties of an Mn<sup>IV</sup>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 |
| 42 | A Diferrous-Dinitrosyl Intermediate in the N<sub>2</sub>O-Generating Pathway of a Deflavinated Flavo-Diiron Protein. Biochemistry, 2014, 53, 5631-5637. | 2.5 | 39 |
| 43 | 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 |
| 44 | Characterization of Monomeric Mn<sup>II/III/IV</sup>â€“Hydroxo Complexes from X- and Q-Band Dual Mode Electron Paramagnetic Resonance (EPR) Spectroscopy. Inorganic Chemistry, 2013, 52, 12568-12575. | 4.0 | 49 |
| 45 | Unsymmetrical Bimetallic Complexes with M<sup>II</sup>â€“(Î¼-OH)â€“M<sup>III</sup> Cores (M<sup>II</sup>M<sup>III</sup> = Fe<sup>II</sup>Fe<sup>III</sup>, Mn<sup>II</sup>Fe<sup>III</sup>,) Tj ETQq1 1 0.784314 rgBT / 2013, 52, 10229-10231. | 4.0 | 31 |
| 46 | The Diheme Cytochrome <i>c</i> Peroxidase from <i>Shewanella oneidensis</i> Requires Reductive Activation. Biochemistry, 2012, 51, 974-985. | 2.5 | 38 |
| 47 | Electron Paramagnetic Resonance and MÃ¶ssbauer Spectroscopy and Density Functional Theory Analysis of a High-Spin Fe<sup>IV</sup>â€“Oxo Complex. Journal of the American Chemical Society, 2012, 134, 9775-9784. | 13.7 | 67 |
| 48 | Preparation and Properties of a Monomeric High-Spin Mn<sup>V</sup>â€“Oxo Complex. Journal of the American Chemical Society, 2012, 134, 1996-1999. | 13.7 | 115 |
| 49 | Oxy Intermediates of Homoprotocatechuate 2,3-Dioxygenase: Facile Electron Transfer between Substrates. Biochemistry, 2011, 50, 10262-10274. | 2.5 | 48 |
| 50 | Enzyme Reactivation by Hydrogen Peroxide in Heme-based Tryptophan Dioxygenase. Journal of Biological Chemistry, 2011, 286, 26541-26554. | 3.4 | 42 |
| 51 | 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 |
| 52 | Formation, Structure, and EPR Detection of a High Spin Fe<sup>IV</sup>â€"Oxo Species Derived from Either an Fe<sup>III</sup>â€"Oxo or Fe<sup>III</sup>â€"OH Complex. Journal of the American Chemical Society, 2010, 132, 12188-12190. | 13.7 | 218 |
| 53 | MÃ¶ssbauer, Electron Paramagnetic Resonance, and Density Functional Theory Studies of Synthetic <i>S</i> = <sup>1</sup>/<sub>2</sub> Fe<sup>III</sup>â^'Oâ^'Fe<sup>IV</sup>â•O Complexes. Superexchange-Mediated Spin Transition at the Fe<sup>IV</sup>â•O Site. Inorganic Chemistry, 2010, 49, 8310-8322. | 4.0 | 22 |
| 54 | EPR and MÃ¶ssbauer Spectroscopy Show Inequivalent Hemes in Tryptophan Dioxygenase. Journal of the American Chemical Society, 2010, 132, 1098-1109. | 13.7 | 20 |

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| 55 | Trapping and spectroscopic characterization of an Fe <sup>III</sup> -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 |
| 56 | Reversible Switching of Magnetism in Thiolate-Protected Au<sub>25</sub> Superatoms. Journal of the American Chemical Society, 2009, 131, 2490-2492. | 13.7 | 414 |
| 57 | Membrane Tetraheme Cytochrome <i>c</i><sub>m552</sub> of the Ammonia-Oxidizing <i>Nitrosomonas europaea</i>: A Ubiquinone Reductase. Biochemistry, 2008, 47, 6539-6551. | 2.5 | 25 |
| 58 | 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 |
| 59 | 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 |
| 60 | Preparation and Properties of a Monomeric MnIVâ˘'Oxo Complex. Journal of the American Chemical Society, 2006, 128, 8728-8729. | 13.7 | 138 |
| 61 | NO Reductase Activity of the Tetraheme Cytochromec554ofNitrosomonas europaea. Journal of the American Chemical Society, 2006, 128, 4330-4337. | 13.7 | 58 |
| 62 | 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 |
| 63 | Metal Binding Studies and EPR Spectroscopy of the Manganese Transport Regulator MntRâ€. Biochemistry, 2006, 45, 15359-15372. | 2.5 | 96 |
| 64 | 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 |
| 65 | Utilization of Hydrogen Bonds To Stabilize Mâ˘'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 |
| 66 | Quantitative analysis of dinuclear manganese(II) EPR spectra. Journal of Magnetic Resonance, 2003, 165, 33-48. | 2.1 | 103 |
| 67 | 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 |
| 68 | 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 |
| 69 | 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 |
| 70 | 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 |
| 71 | Spectroscopic Characterization of the NO Adduct of Hydroxylamine Oxidoreductase. Biochemistry, 2002, 41, 4603-4611. | 2.5 | 39 |
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| 73 | 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 |
| 74 | 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 |
| 75 | O2 Activation by Nonheme Iron Complexes: A Monomeric Fe(III)-Oxo Complex Derived From O2. Science, 2000, 289, 938-941. | 12.6 | 423 |
| 76 | 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 |
| 77 | 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 |
| 78 | Structure and Magnetic Properties of Trigonal Bipyramidal Iron Nitrosyl Complexes. Inorganic Chemistry, 1999, 38, 3110-3115. | 4.0 | 75 |
| 79 | Correlation of Optical and EPR Signals with the P460 Heme of Hydroxylamine Oxidoreductase fromNitrosomonas europaeaâ€. Biochemistry, 1998, 37, 523-529. | 2.5 | 20 |
| 80 | 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 |
| 81 | Manganese(II)-Dependent Extradiol-Cleaving Catechol Dioxygenase fromArthrobacter globiformisCM-2â€. Biochemistry, 1996, 35, 160-170. | 2.5 | 130 |
| 82 | Structural and Spectroscopic Properties of Antiferromagnetically Coupled FeIIIMnII and FeIIMnII Complexes. Inorganic Chemistry, 1995, 34, 134-139. | 4.0 | 36 |
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| 84 | Carboxylatoiron(II) Aggregates: A Novel Fe4II Complex with Threefold Symmetry. Angewandte Chemie International Edition in English, 1994, 33, 1660-1662. | 4.4 | 17 |
| 85 | Carboxylatoeisen(<scp>II</scp>)â€Aggregate: ein neuer Feâ€Komplex mit dreizÃ¤hliger Symmetrie. Angewandte Chemie, 1994, 106, 1730-1733. | 2.0 | 1 |
| 86 | 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 |
| 87 | 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 |
| 88 | 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 |
| 89 | 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 |
| 90 | [17] Combining MÃ¶ssbauer spectroscopy with integer spin electron paramagnetic resonance. Methods in Enzymology, 1993, 227, 463-479. | 1.0 | 56 |

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| 91 | 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 |
| 92 | 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 |
| 93 | 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 |
| 94 | 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 |