## Brian M Hoffman

# List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

66 248 14,415 109 h-index g-index citations papers 261 16,429 6.48 11.3 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
248	Small-Molecule Mn Antioxidants in Caenorhabditis elegans and Deinococcus radiodurans Supplant MnSOD Enzymes during Aging and Irradiation <i>MBio</i> , <b>2022</b> , e0339421	7.8	2
247	End-On Copper(I) Superoxo and Cu(II) Peroxo and Hydroperoxo Complexes Generated by Cryoreduction/Annealing and Characterized by EPR/ENDOR Spectroscopy <i>Journal of the American Chemical Society</i> , <b>2022</b> ,	16.4	4
246	A mixed-valent Fe(II)Fe(III) species converts cysteine to an oxazolone/thioamide pair in methanobactin biosynthesis <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2022</b> , 119, e2123566119	11.5	1
245	Active-Site Controlled, Jahn-Teller Enabled Regioselectivity in Reductive S-C Bond Cleavage of -Adenosylmethionine in Radical SAM Enzymes. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 33	5- <del>3</del> 48 <sup>4</sup>	7
244	Interplays of electron and nuclear motions along CO dissociation trajectory in myoglobin revealed by ultrafast X-rays and quantum dynamics calculations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	3
243	Exploring the Role of the Central Carbide of the Nitrogenase Active-Site FeMo-cofactor through Targeted C Labeling and ENDOR Spectroscopy. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 91	8 <del>3</del> -919	0 <sup>1</sup>
242	An ecophysiological explanation for manganese enrichment in rock varnish. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	5
241	Metal ion fluxes controlling amphibian fertilization. <i>Nature Chemistry</i> , <b>2021</b> , 13, 683-691	17.6	4
240	-Adenosyl-l-ethionine is a Catalytically Competent Analog of -Adenosyl-l-methione (SAM) in the Radical SAM Enzyme HydG. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 4666-4672	16.4	9
239	S-Adenosyl-l-ethionine is a Catalytically Competent Analog of S-Adenosyl-l-methionine (SAM) in the Radical SAM Enzyme HydG. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 4716-4722	3.6	2
238	An Engineered Glutamate in Biosynthetic Models of Heme-Copper Oxidases Drives Complete Product Selectivity by Tuning the Hydrogen-Bonding Network. <i>Biochemistry</i> , <b>2021</b> , 60, 346-355	3.2	3
237	The electronic structure of FeV-cofactor in vanadium-dependent nitrogenase. <i>Chemical Science</i> , <b>2021</b> , 12, 6913-6922	9.4	6
236	Comment on "Structural evidence for a dynamic metallocofactor during N reduction by Mo-nitrogenase". <i>Science</i> , <b>2021</b> , 371,	33.3	10
235	Hydrocarbon Oxidation by an Exposed, Multiply Bonded Iron(III) Oxo Complex. <i>ACS Central Science</i> , <b>2021</b> , 7, 1751-1755	16.8	1
234	Coordination of the Copper Centers in Particulate Methane Monooxygenase: Comparison between Methanotrophs and Characterization of the Cu Site by EPR and ENDOR Spectroscopies. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 15358-15368	16.4	6
233	Electron Redistribution within the Nitrogenase Active Site FeMo-Cofactor During Reductive Elimination of H to Achieve N?N Triple-Bond Activation. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 21679-21690	16.4	11
232	Reduction of Substrates by Nitrogenases. <i>Chemical Reviews</i> , <b>2020</b> , 120, 5082-5106	68.1	90

231	The Soybean Lipoxygenase-Substrate Complex: Correlation between the Properties of Tunneling-Ready States and ENDOR-Detected Structures of Ground States. <i>Biochemistry</i> , <b>2020</b> , 59, 901	-9170	8
230	CO as a substrate and inhibitor of H reduction for the Mo-, V-, and Fe-nitrogenase isozymes. <i>Journal of Inorganic Biochemistry</i> , <b>2020</b> , 213, 111278	4.2	8
229	Structural and spectroscopic characterization of an Fe(VI) bis(imido) complex. Science, 2020, 370, 356-3	5 <b>9</b> 3.3	20
228	The Role of Co-ZSM-5 Catalysts in Aerobic Oxidation of Ethylbenzene. <i>Topics in Catalysis</i> , <b>2020</b> , 63, 1708	8- <u>1</u> .716	1
227	Radical SAM Enzyme Spore Photoproduct Lyase: Properties of the Organometallic Intermediate and Identification of Stable Protein Radicals Formed during Substrate-Free Turnover. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 18652-18660	16.4	5
226	C Electron Nuclear Double Resonance Spectroscopy Shows Acetyl-CoA Synthase Binds Two Substrate CO in Multiple Binding Modes and Reveals the Importance of a CO-Binding "Alcove". <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 15362-15370	16.4	5
225	Spectroscopic Description of the E State of Mo Nitrogenase Based on Mo and Fe X-ray Absorption and M¶ssbauer Studies. <i>Inorganic Chemistry</i> , <b>2019</b> , 58, 12365-12376	5.1	23
224	Photoinduced Electron Transfer in a Radical SAM Enzyme Generates an -Adenosylmethionine Derived Methyl Radical. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 16117-16124	16.4	17
223	MbnH is a diheme MauG-like protein associated with microbial copper homeostasis. <i>Journal of Biological Chemistry</i> , <b>2019</b> , 294, 16141-16151	5.4	2
222	Time-Resolved EPR Study of H Reductive Elimination from the Photoexcited Nitrogenase Janus E(4H) Intermediate. <i>Journal of Physical Chemistry B</i> , <b>2019</b> , 123, 8823-8828	3.4	7
221	Short-lived neutral FMN and FAD semiquinones are transient intermediates in cryo-reduced yeast NADPH-cytochrome P450 reductase. <i>Archives of Biochemistry and Biophysics</i> , <b>2019</b> , 673, 108080	4.1	
220	High-Resolution ENDOR Spectroscopy Combined with Quantum Chemical Calculations Reveals the Structure of Nitrogenase Janus Intermediate E(4H). <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 11984-11996	16.4	33
219	Particulate methane monooxygenase contains only mononuclear copper centers. <i>Science</i> , <b>2019</b> , 364, 566-570	33.3	136
218	Formation and Electronic Structure of an Atypical Cu Site. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 4678-4686	16.4	12
217	Mo-, V-, and Fe-Nitrogenases Use a Universal Eight-Electron Reductive-Elimination Mechanism To Achieve N Reduction. <i>Biochemistry</i> , <b>2019</b> , 58, 3293-3301	3.2	59
216	The Elusive 5'-Deoxyadenosyl Radical: Captured and Characterized by Electron Paramagnetic Resonance and Electron Nuclear Double Resonance Spectroscopies. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 12139-12146	16.4	42
215	Manganese co-localizes with calcium and phosphorus in acidocalcisomes and is mobilized in manganese-deficient conditions. <i>Journal of Biological Chemistry</i> , <b>2019</b> , 294, 17626-17641	5.4	32
214	PCuC domains from methane-oxidizing bacteria use a histidine brace to bind copper. <i>Journal of Biological Chemistry</i> , <b>2019</b> , 294, 16351-16363	5.4	2

213	Cu-specific CopB transporter: Revising P-type ATPase classification. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, 2108-2113	11.5	22
212	Mechanism of N Reduction Catalyzed by Fe-Nitrogenase Involves Reductive Elimination of H. <i>Biochemistry</i> , <b>2018</b> , 57, 701-710	3.2	47
211	Organometallic and radical intermediates reveal mechanism of diphthamide biosynthesis. <i>Science</i> , <b>2018</b> , 359, 1247-1250	33.3	32
210	Hydride Conformers of the Nitrogenase FeMo-cofactor Two-Electron Reduced State E(2H), Assigned Using Cryogenic Intra Electron Paramagnetic Resonance Cavity Photolysis. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 6847-6852	5.1	17
209	Paradigm Shift for Radical S-Adenosyl-l-methionine Reactions: The Organometallic Intermediate [] Is Central to Catalysis. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 8634-8638	16.4	55
208	From micelles to bicelles: Effect of the membrane on particulate methane monooxygenase activity. Journal of Biological Chemistry, <b>2018</b> , 293, 10457-10465	5.4	32
207	Energy Transduction in Nitrogenase. Accounts of Chemical Research, 2018, 51, 2179-2186	24.3	62
206	A structurally-characterized peroxomanganese(iv) porphyrin from reversible O binding within a metal-organic framework. <i>Chemical Science</i> , <b>2018</b> , 9, 1596-1603	9.4	25
205	Isolation and characterization of a high-spin mixed-valent iron dinitrogen complex. <i>Chemical Communications</i> , <b>2018</b> , 54, 13339-13342	5.8	9
204	Critical computational analysis illuminates the reductive-elimination mechanism that activates nitrogenase for N reduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, E10521-E10530	11.5	69
203	Mechanism of Radical Initiation in the Radical S-Adenosyl-l-methionine Superfamily. <i>Accounts of Chemical Research</i> , <b>2018</b> , 51, 2611-2619	24.3	52
202	Characterization of a long overlooked copper protein from methane- and ammonia-oxidizing bacteria. <i>Nature Communications</i> , <b>2018</b> , 9, 4276	17.4	30
201	Kinetic Understanding of N Reduction versus H Evolution at the E(4H) Janus State in the Three Nitrogenases. <i>Biochemistry</i> , <b>2018</b> , 57, 5706-5714	3.2	25
<b>2</b> 00	ENDOR Characterization of (N)Fe(FH)Fe(N): A Spectroscopic Model for N Binding by the Di-Ehydrido Nitrogenase Janus Intermediate. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 12323-12330	5.1	8
199	Control of electron transfer in nitrogenase. Current Opinion in Chemical Biology, 2018, 47, 54-59	9.7	26
198	Beyond fossil fuel-driven nitrogen transformations. <i>Science</i> , <b>2018</b> , 360,	33.3	77²
197	C ENDOR Spectroscopy of Lipoxygenase-Substrate Complexes Reveals the Structural Basis for C-H Activation by Tunneling. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 1984-1997	16.4	32
196	Photoinduced Reductive Elimination of H from the Nitrogenase Dihydride (Janus) State Involves a FeMo-cofactor-H Intermediate. <i>Inorganic Chemistry</i> , <b>2017</b> , 56, 2233-2240	5.1	33

195	EPR/ENDOR and Theoretical Study of the Jahn-Teller-Active [HIPTNN]MoL Complexes (L = N, NH). <i>Inorganic Chemistry</i> , <b>2017</b> , 56, 6906-6919	5.1	11
194	Substrate-Dependent Cleavage Site Selection by Unconventional Radical S-Adenosylmethionine Enzymes in Diphthamide Biosynthesis. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 5680-5683	16.4	17
193	Metal Selectivity of a Cd-, Co-, and Zn-Transporting P-type ATPase. <i>Biochemistry</i> , <b>2017</b> , 56, 85-95	3.2	13
192	Across the tree of life, radiation resistance is governed by antioxidant Mn, gauged by paramagnetic resonance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, E9253-E9260	11.5	58
191	Mechanism of Nitrogenase H Formation by Metal-Hydride Protonation Probed by Mediated Electrocatalysis and H/D Isotope Effects. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 13518-135	5 <u>16</u> 4	38
190	Nitrogen Fixation <b>2017</b> , 1-21		12
189	Monovalent Cation Activation of the Radical SAM Enzyme Pyruvate Formate-Lyase Activating Enzyme. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 11803-11813	16.4	18
188	ENDOR characterization of an iron-alkene complex provides insight into a corresponding organometallic intermediate of nitrogenase. <i>Chemical Science</i> , <b>2017</b> , 8, 5941-5948	9.4	6
187	Discovery of the Antitumor Effects of a Porphyrazine Diol (Pz 285) in MDA-MB-231 Breast Tumor Xenograft Models in Mice. <i>ACS Medicinal Chemistry Letters</i> , <b>2017</b> , 8, 705-709	4.3	
186	Reductive Elimination of H2 Activates Nitrogenase to Reduce the N?N Triple Bond: Characterization of the E4(4H) Janus Intermediate in Wild-Type Enzyme. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 10674-83	16.4	100
185	Characterization of Methanobactin from Methylosinus sp. LW4. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 11124-7	16.4	27
184	Charge-Disproportionation Symmetry Breaking Creates a Heterodimeric Myoglobin Complex with Enhanced Affinity and Rapid Intracomplex Electron Transfer. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 12615-28	16.4	5
183	Ultrafast Excited State Relaxation of a Metalloporphyrin Revealed by Femtosecond X-ray Absorption Spectroscopy. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 8752-64	16.4	67
182	Reversible Photoinduced Reductive Elimination of H2 from the Nitrogenase Dihydride State, the E(4)(4H) Janus Intermediate. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 1320-7	16.4	48
181	Role of the Proximal Cysteine Hydrogen Bonding Interaction in Cytochrome P450 2B4 Studied by Cryoreduction, Electron Paramagnetic Resonance, and Electron-Nuclear Double Resonance Spectroscopy. <i>Biochemistry</i> , <b>2016</b> , 55, 869-83	3.2	19
180	Comparison of the Mechanisms of Heme Hydroxylation by Heme Oxygenases-1 and -2: Kinetic and Cryoreduction Studies. <i>Biochemistry</i> , <b>2016</b> , 55, 62-8	3.2	7
179	Spectroscopic and Crystallographic Evidence for the Role of a Water-Containing H-Bond Network in Oxidase Activity of an Engineered Myoglobin. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 1134	<u>1</u> 6.4	23
178	Radical SAM catalysis via an organometallic intermediate with an Fe-[5'-C]-deoxyadenosyl bond. <i>Science</i> , <b>2016</b> , 352, 822-5	33.3	86

177	Negative cooperativity in the nitrogenase Fe protein electron delivery cycle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, E5783-E5791	11.5	25
176	Imaging ultrafast excited state pathways in transition metal complexes by X-ray transient absorption and scattering using X-ray free electron laser source. <i>Faraday Discussions</i> , <b>2016</b> , 194, 639-65	58 <sup>3.6</sup>	10
175	Exploring Electron/Proton Transfer and Conformational Changes in the Nitrogenase MoFe Protein and FeMo-cofactor Through Cryoreduction/EPR Measurements. <i>Israel Journal of Chemistry</i> , <b>2016</b> , 56, 841-851	3.4	10
174	CO2 Reduction Catalyzed by Nitrogenase: Pathways to Formate, Carbon Monoxide, and Methane. <i>Inorganic Chemistry</i> , <b>2016</b> , 55, 8321-30	5.1	34
173	Organometallic Complex Formed by an Unconventional Radical S-Adenosylmethionine Enzyme. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 9755-8	16.4	20
172	The C-terminal heme regulatory motifs of heme oxygenase-2 are redox-regulated heme binding sites. <i>Biochemistry</i> , <b>2015</b> , 54, 2709-18	3.2	21
171	Identification of a key catalytic intermediate demonstrates that nitrogenase is activated by the reversible exchange of NIfor HIJ Journal of the American Chemical Society, <b>2015</b> , 137, 3610-5	16.4	83
170	Advanced paramagnetic resonance spectroscopies of iron-sulfur proteins: Electron nuclear double resonance (ENDOR) and electron spin echo envelope modulation (ESEEM). <i>Biochimica Et Biophysica Acta - Molecular Cell Research</i> , <b>2015</b> , 1853, 1370-94	4.9	25
169	Why Nature Uses Radical SAM Enzymes so Widely: Electron Nuclear Double Resonance Studies of Lysine 2,3-Aminomutase Show the 5'-dAdol'Free Radical" Is Never Free. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 7111-21	16.4	50
168	Spectroscopic studies reveal that the heme regulatory motifs of heme oxygenase-2 are dynamically disordered and exhibit redox-dependent interaction with heme. <i>Biochemistry</i> , <b>2015</b> , 54, 2693-708	3.2	14
167	Evidence That Compound I Is the Active Species in Both the Hydroxylase and Lyase Steps by Which P450scc Converts Cholesterol to Pregnenolone: EPR/ENDOR/Cryoreduction/Annealing Studies. <i>Biochemistry</i> , <b>2015</b> , 54, 7089-97	3.2	25
166	Characterization of an Fe?N-NH2 Intermediate Relevant to Catalytic N2 Reduction to NH3. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 7803-7809	16.4	134
165	Composition and Structure of the Inorganic Core of Relaxed Intermediate X(Y122F) of Escherichia coli Ribonucleotide Reductase. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 15558-66	16.4	15
164	Synthesis and characterization of a porphyrazine-Gd(III) MRI contrast agent and in vivo imaging of a breast cancer xenograft model. <i>Contrast Media and Molecular Imaging</i> , <b>2014</b> , 9, 313-22	3.2	15
163	Mechanism of nitrogen fixation by nitrogenase: the next stage. <i>Chemical Reviews</i> , <b>2014</b> , 114, 4041-62	68.1	1073
162	Nitrite and hydroxylamine as nitrogenase substrates: mechanistic implications for the pathway of Nireduction. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 12776-83	16.4	28
161	A confirmation of the quench-cryoannealing relaxation protocol for identifying reduction states of freeze-trapped nitrogenase intermediates. <i>Inorganic Chemistry</i> , <b>2014</b> , 53, 3688-93	5.1	31
160	EPR, ENDOR, and electronic structure studies of the Jahn-Teller distortion in an Fe(V) nitride. Journal of the American Chemical Society, <b>2014</b> , 136, 12323-36	16.4	42

## (2011-2014)

159	Free Hirotation vs Jahn-Teller constraints in the nonclassical trigonal (TPB)Co-Hiromplex. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 14998-5009	16.4	31
158	Electron paramagnetic resonance and electron-nuclear double resonance studies of the reactions of cryogenerated hydroperoxoferric-hemoprotein intermediates. <i>Biochemistry</i> , <b>2014</b> , 53, 4894-903	3.2	12
157	Identification of the valence and coordination environment of the particulate methane monooxygenase copper centers by advanced EPR characterization. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 11767-75	16.4	42
156	Internal dynamics of a supramolecular nanofibre. <i>Nature Materials</i> , <b>2014</b> , 13, 812-6	27	131
155	The use of deuterated camphor as a substrate in (1)H ENDOR studies of hydroxylation by cryoreduced oxy P450cam provides new evidence of the involvement of compound I. <i>Biochemistry</i> , <b>2013</b> , 52, 667-71	3.2	24
154	Nitrogenase: a draft mechanism. Accounts of Chemical Research, 2013, 46, 587-95	24.3	282
153	Responses of Mn2+ speciation in Deinococcus radiodurans and Escherichia coli to Fadiation by advanced paramagnetic resonance methods. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 5945-50	11.5	55
152	On reversible H2 loss upon N2 binding to FeMo-cofactor of nitrogenase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 16327-32	11.5	78
151	Electron transfer precedes ATP hydrolysis during nitrogenase catalysis. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 16414-9	11.5	74
150	Temperature invariance of the nitrogenase electron transfer mechanism. <i>Biochemistry</i> , <b>2012</b> , 51, 8391-	·83.2	11
150 149	Temperature invariance of the nitrogenase electron transfer mechanism. <i>Biochemistry</i> , <b>2012</b> , 51, 8391- Evidence for oxygen binding at the active site of particulate methane monooxygenase. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 7640-3	16.4	
	Evidence for oxygen binding at the active site of particulate methane monooxygenase. <i>Journal of</i>		
149	Evidence for oxygen binding at the active site of particulate methane monooxygenase. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 7640-3  Multi-gram synthesis of a porphyrazine platform for cellular translocation, conjugation to	16.4	76
149	Evidence for oxygen binding at the active site of particulate methane monooxygenase. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 7640-3  Multi-gram synthesis of a porphyrazine platform for cellular translocation, conjugation to Doxorubicin, and cellular uptake. <i>Tetrahedron Letters</i> , <b>2012</b> , 53, 5475-5478  Modeling the signatures of hydrides in metalloenzymes: ENDOR analysis of a Di-iron	16.4	76
149 148 147	Evidence for oxygen binding at the active site of particulate methane monooxygenase. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 7640-3  Multi-gram synthesis of a porphyrazine platform for cellular translocation, conjugation to Doxorubicin, and cellular uptake. <i>Tetrahedron Letters</i> , <b>2012</b> , 53, 5475-5478  Modeling the signatures of hydrides in metalloenzymes: ENDOR analysis of a Di-iron Fe(ENH)(EH)Fe core. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 12637-47	16.4 2 16.4	76 13 37
149 148 147 146	Evidence for oxygen binding at the active site of particulate methane monooxygenase. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 7640-3  Multi-gram synthesis of a porphyrazine platform for cellular translocation, conjugation to Doxorubicin, and cellular uptake. <i>Tetrahedron Letters</i> , <b>2012</b> , 53, 5475-5478  Modeling the signatures of hydrides in metalloenzymes: ENDOR analysis of a Di-iron Fe(ENH)(EH)Fe core. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 12637-47  Characterization of a cobalt-specific P(1B)-ATPase. <i>Biochemistry</i> , <b>2012</b> , 51, 7891-900  Compound I is the reactive intermediate in the first monooxygenation step during conversion of cholesterol to pregnenolone by cytochrome P450scc: EPR/ENDOR/cryoreduction/annealing	16.4 2 16.4 3.2	76 13 37 24
149 148 147 146	Evidence for oxygen binding at the active site of particulate methane monooxygenase. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 7640-3  Multi-gram synthesis of a porphyrazine platform for cellular translocation, conjugation to Doxorubicin, and cellular uptake. <i>Tetrahedron Letters</i> , <b>2012</b> , 53, 5475-5478  Modeling the signatures of hydrides in metalloenzymes: ENDOR analysis of a Di-iron Fe(ENH)(EH)Fe core. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 12637-47  Characterization of a cobalt-specific P(1B)-ATPase. <i>Biochemistry</i> , <b>2012</b> , 51, 7891-900  Compound I is the reactive intermediate in the first monooxygenation step during conversion of cholesterol to pregnenolone by cytochrome P450scc: EPR/ENDOR/cryoreduction/annealing studies. <i>Journal of the American Chemical Society</i> , <b>2012</b> , 134, 17149-56  Characterization of the Fe?H Bond in a Three-Coordinate Terminal Hydride Complex of Iron(I).	16.4 2 16.4 3.2	76 13 37 24 36

141	Active intermediates in heme monooxygenase reactions as revealed by cryoreduction/annealing, EPR/ENDOR studies. <i>Archives of Biochemistry and Biophysics</i> , <b>2011</b> , 507, 36-43	4.1	47
140	ENDOR/HYSCORE studies of the common intermediate trapped during nitrogenase reduction of N2H2, CH3N2H, and N2H4 support an alternating reaction pathway for N2 reduction. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 11655-64	16.4	75
139	Design, Implementation, Simulation, and Visualization of a Highly Efficient RIM Microfluidic Mixer for Rapid Freeze-Quench of Biological Samples. <i>Applied Magnetic Resonance</i> , <b>2011</b> , 40, 415-425	0.8	8
138	Transformation of an [Fe(ᢓ-N2H3)]+ Species to EDelocalized [Fe2(EN2H2)]2+/+ Complexes. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 3508-3511	3.6	6
137	Electron transfer within nitrogenase: evidence for a deficit-spending mechanism. <i>Biochemistry</i> , <b>2011</b> , 50, 9255-63	3.2	97
136	Crystal structure and characterization of particulate methane monooxygenase from Methylocystis species strain M. <i>Biochemistry</i> , <b>2011</b> , 50, 10231-40	3.2	101
135	Chiral bis-acetal porphyrazines as near-infrared optical agents for detection and treatment of cancer. <i>Photochemistry and Photobiology</i> , <b>2010</b> , 86, 410-7	3.6	20
134	Chiral porphyrazine near-IR optical imaging agent exhibiting preferential tumor accumulation.  Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 1284-8	11.5	64
133	Probing in vivo Mn2+ speciation and oxidative stress resistance in yeast cells with electron-nuclear double resonance spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 15335-9	11.5	93
132	Paramagnetic intermediates of (E)-4-hydroxy-3-methylbut-2-enyl diphosphate synthase (GcpE/IspG) under steady-state and pre-steady-state conditions. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 14509-20	16.4	35
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