J Martin Bollinger Jr

List of Publications by Year
in descending order

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127 papers	10,884 citations	23567 58 h-index	31849 101 g-index
131 all docs	131 docs citations	131 times ranked	4751 citing authors

#	Article	IF	Citations
1	Non-Heme Fe(IV)â€“Oxo Intermediates. Accounts of Chemical Research, 2007, 40, 484-492.	15.6	866
2	The First Direct Characterization of a High-Valent Iron Intermediate in the Reaction of an Î±-Ketoglutarate-Dependent Dioxygenase:â€‰ A High-Spin Fe(IV) Complex in Taurine/Î±-Ketoglutarate Dioxygenase (TauD) from Escherichia coli. Biochemistry, 2003, 42, 7497-7508.	2.5	654
3	Evidence for Hydrogen Abstraction from C1 of Taurine by the High-Spin Fe(IV) Intermediate Detected during Oxygen Activation by Taurine:Î±-Ketoglutarate Dioxygenase (TauD). Journal of the American Chemical Society, 2003, 125, 13008-13009.	13.7	373
4	Two interconverting Fe(IV) intermediates in aliphatic chlorination by the halogenase CytC3. Nature Chemical Biology, 2007, 3, 113-116.	8.0	305
5	Direct spectroscopic detection of a C-H-cleaving high-spin Fe(IV) complex in a prolyl-4-hydroxylase. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 14738-14743.	7.1	289
6	EXAFS Spectroscopic Evidence for an Feâ•O Unit in the Fe(IV) Intermediate Observed during Oxygen Activation by Taurine:Î±-Ketoglutarate Dioxygenase. Journal of the American Chemical Society, 2004, 126, 8108-8109.	13.7	282
7	Mechanism of Assembly of the Tyrosyl Radical-Diiron(III) Cofactor of E. Coli Ribonucleotide Reductase: 1. Moessbauer Characterization of the Diferric Radical Precursor. Journal of the American Chemical Society, 1994, 116, 8007-8014.	13.7	215
8	Substrate-Triggered Formation and Remarkable Stability of the Câˆ’H Bond-Cleaving Chloroferryl Intermediate in the Aliphatic Halogenase, SyrB2. Biochemistry, 2009, 48, 4331-4343.	2.5	212
9	Substrate positioning controls the partition between halogenation and hydroxylation in the aliphatic halogenase, SyrB2. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17723-17728.	7.1	206
10	Elucidation of the Fe(iv)=O intermediate in the catalytic cycle of the halogenase SyrB2. Nature, 2013, 499, 320-323.	27.8	192
11	Spectroscopic and Computational Evaluation of the Structure of the High-Spin Fe(IV)-Oxo Intermediates in Taurine: Î±-Ketoglutarate Dioxygenase fromEscherichia coliand Its His99Ala Ligand Variant. Journal of the American Chemical Society, 2007, 129, 6168-6179.	13.7	191
12	A Manganese(IV)/Iron(III) Cofactor in Chlamydia trachomatis Ribonucleotide Reductase. Science, 2007, 316, 1188-1191.	12.6	186
13	Mechanism of Assembly of the Tyrosyl Radical-Diiron(III) Cofactor of E. coli Ribonucleotide Reductase. 2. Kinetics of The Excess Fe2+ Reaction by Optical, EPR, and Moessbauer Spectroscopies. Journal of the American Chemical Society, 1994, 116, 8015-8023.	13.7	179
14	Mechanism of Taurine: Î±â€Ketoglutarate Dioxygenase (TauD) from Escherichia coli. European Journal of Inorganic Chemistry, 2005, 2005, 4245-4254.	2.0	178
15	O2Activation by Non-Heme Diiron Proteins:Â Identification of a Symmetric Î¼-1,2-Peroxide in a Mutant of Ribonucleotide Reductaseâ€. Biochemistry, 1998, 37, 14659-14663.	2.5	173
16	Direct Spectroscopic Evidence for a High-Spin Fe(IV) Intermediate in Tyrosine Hydroxylase. Journal of the American Chemical Society, 2007, 129, 11334-11335.	13.7	164
17	Mechanism of Assembly of the Tyrosyl Radical-Diiron(III) Cofactorof E. coli Ribonucleotide Reductase. 3. Kinetics of the Limiting Fe2+ Reaction by Optical, EPR, and Moessbauer Spectroscopies. Journal of the American Chemical Society, 1994, 116, 8024-8032.	13.7	154
18	Kinetic Dissection of the Catalytic Mechanism of Taurine:Î±-Ketoglutarate Dioxygenase (TauD) from Escherichia coli. Biochemistry, 2005, 44, 8138-8147.	2.5	152

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19	Drop-on-demand sample delivery for studying biocatalysts in action at X-ray free-electron lasers. Nature Methods, 2017, 14, 443-449.	19.0	150
20	Engineering the Diiron Site ofEscherichia coliRibonucleotide Reductase Protein R2 to Accumulate an Intermediate Similar to Hperoxo, the Putative Peroxodiiron(III) Complex from the Methane Monooxygenase Catalytic Cycle. Journal of the American Chemical Society, 1998, 120, 1094-1095.	13.7	144
21	Spectroscopic Evidence for a High-Spin Br-Fe(IV)-Oxo Intermediate in the Î±-Ketoglutarate-Dependent Halogenase CytC3 from <i>Streptomyces</i>. Journal of the American Chemical Society, 2007, 129, 13408-13409.	13.7	140
22	Enzymatic Câ€“H activation by metalâ€“superoxo intermediates. Current Opinion in Chemical Biology, 2007, 11, 151-158.	6.1	140
23	Mechanism of Rapid Electron Transfer during Oxygen Activation in the R2 Subunit ofEscherichiacoliRibonucleotide Reductase. 1. Evidence for a Transient Tryptophan Radical. Journal of the American Chemical Society, 2000, 122, 12195-12206.	13.7	138
24	Detection of Formate, Rather than Carbon Monoxide, As the Stoichiometric Coproduct in Conversion of Fatty Aldehydes to Alkanes by a Cyanobacterial Aldehyde Decarbonylase. Journal of the American Chemical Society, 2011, 133, 3316-3319.	13.7	136
25	Stalking intermediates in oxygen activation by iron enzymes: Motivation and method. Journal of Inorganic Biochemistry, 2006, 100, 586-605.	3.5	131
26	Evidence for Only Oxygenative Cleavage of Aldehydes to Alk(a/e)nes and Formate by Cyanobacterial Aldehyde Decarbonylases. Biochemistry, 2012, 51, 7908-7916.	2.5	130
27	Rapid Freeze-Quench57Fe MÃ¶ssbauer Spectroscopy:Â Monitoring Changes of an Iron-Containing Active Site during a Biochemical Reaction. Inorganic Chemistry, 2005, 44, 742-757.	4.0	126
28	Mechanism of the C5 Stereoinversion Reaction in the Biosynthesis of Carbapenem Antibiotics. Science, 2014, 343, 1140-1144.	12.6	122
29	Conversion of Fatty Aldehydes to Alka(e)nes and Formate by a Cyanobacterial Aldehyde Decarbonylase: Cryptic Redox by an Unusual Dimetal Oxygenase. Journal of the American Chemical Society, 2011, 133, 6158-6161.	13.7	120
30	Direct nitration and azidation of aliphatic carbons by an iron-dependent halogenase. Nature Chemical Biology, 2014, 10, 209-215.	8.0	113
31	Evidence for C-H cleavage by an iron-superoxide complex in the glycol cleavage reaction catalyzed by myo-inositol oxygenase. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6130-6135.	7.1	111
32	Substrate activation by iron superoxo intermediates. Current Opinion in Structural Biology, 2010, 20, 673-683.	5.7	107
33	The biosynthesis of methanobactin. Science, 2018, 359, 1411-1416.	12.6	101
34	Spectroscopic Evidence for the Two Câ€“H-Cleaving Intermediates of <i>Aspergillus nidulans</i> Isopenicillin <i>N</i> Synthase. Journal of the American Chemical Society, 2016, 138, 8862-8874.	13.7	99
35	Two Distinct Mechanisms for Câ€“C Desaturation by Iron(II)- and 2-(Oxo)glutarate-Dependent Oxygenases: Importance of Î±-Heteroatom Assistance. Journal of the American Chemical Society, 2018, 140, 7116-7126.	13.7	98
36	Visualizing the Reaction Cycle in an Iron(II)- and 2-(Oxo)-glutarate-Dependent Hydroxylase. Journal of the American Chemical Society, 2017, 139, 13830-13836.	13.7	97

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37	Novel diferric radical intermediate responsible for tyrosyl radical formation in assembly of the cofactor of ribonucleotide reductase. Journal of the American Chemical Society, 1991, 113, 6289-6291.	13.7	91
38	Electronic Structure Analysis of the Oxygenâ€Activation Mechanism by Fe^{II}â€•and Î±â€Ketoglutarate (Î±KG)â€Dependent Dioxygenases. Chemistry - A European Journal, 2012, 18, 6555-6567.	3.3	89
39	CD and MCD of CytC3 and Taurine Dioxygenase:â€‰ Role of the Facial Triad in Î±-KG-Dependent Oxygenases. Journal of the American Chemical Society, 2007, 129, 14224-14231.	13.7	86
40	Nature of the Peroxo Intermediate of the W48F/D84E Ribonucleotide Reductase Variant:Â Implications for O2Activation by Binuclear Non-Heme Iron Enzymes. Journal of the American Chemical Society, 2004, 126, 8842-8855.	13.7	85
41	A Long-Lived, Substrate-Hydroxylating Peroxodiiron(III/III) Intermediate in the Amine Oxygenase, AurF, from <i>Streptomyces thioluteus</i>. Journal of the American Chemical Society, 2009, 131, 13608-13609.	13.7	81
42	Cyanobacterial alkane biosynthesis further expands the catalytic repertoire of the ferritin-like â€˜di-iron-carboxylateâ€™ proteins. Current Opinion in Chemical Biology, 2011, 15, 291-303.	6.1	81
43	A Manganese(IV)/Iron(IV) Intermediate in Assembly of the Manganese(IV)/Iron(III) Cofactor of <i>Chlamydia trachomatis</i> Ribonucleotide Reductase. Biochemistry, 2007, 46, 8709-8716.	2.5	78
44	Experimental Correlation of Substrate Position with Reaction Outcome in the Aliphatic Halogenase, SyrB2. Journal of the American Chemical Society, 2015, 137, 6912-6919.	13.7	78
45	Evidence for a High-Spin Fe(IV) Species in the Catalytic Cycle of a Bacterial Phenylalanine Hydroxylase. Biochemistry, 2011, 50, 1928-1933.	2.5	77
46	Evidence for the slow reaction of hypoxiaâ€inducible factor prolyl hydroxylaseâ€ƒ2 with oxygen. FEBS Journal, 2010, 277, 4089-4099.	4.7	75
47	Rational Reprogramming of the R2 Subunit ofEscherichia coliRibonucleotide Reductase into a Self-Hydroxylating Monooxygenase. Journal of the American Chemical Society, 2001, 123, 7017-7030.	13.7	73
48	myo-Inositol oxygenase: a radical new pathway for O₂and Câ€“H activation at a nonheme diiron cluster. Dalton Transactions, 2009, , 905-914.	3.3	73
49	Spectroscopic and Electronic Structure Studies of IntermediateXin Ribonucleotide Reductase R2 and Two Variants:Â A Description of the FeIV-Oxo Bond in the FeIIIâˆ’Oâˆ’FeIVDimer. Journal of the American Chemical Society, 2007, 129, 9049-9065.	13.7	71
50	Fe-S cofactors in the SARS-CoV-2 RNA-dependent RNA polymerase are potential antiviral targets. Science, 2021, 373, 236-241.	12.6	71
51	Mechanism of Rapid Electron Transfer during Oxygen Activation in the R2 Subunit ofEscherichiacoliRibonucleotide Reductase. 2. Evidence for and Consequences of Blocked Electron Transfer in the W48F Variant. Journal of the American Chemical Society, 2000, 122, 12207-12219.	13.7	70
52	Four-electron oxidation of <i>p</i> -hydroxylaminobenzoate to <i>p</i> -nitrobenzoate by a peroxodiferric complex in AurF from <i>Streptomyces thioluteus</i>. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15722-15727.	7.1	70
53	Evidence that the Fosfomycin-Producing Epoxidase, HppE, Is a Nonâ€“Heme-Iron Peroxidase. Science, 2013, 342, 991-995.	12.6	69
54	Mechanisms of 2-Oxoglutarate-Dependent Oxygenases: The Hydroxylation Paradigm and Beyond. 2-Oxoglutarate-Dependent Oxygenases, 2015, , 95-122.	0.8	69

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55	Substrate-Triggered Addition of Dioxygen to the Diferrous Cofactor of Aldehyde-Deformylating Oxygenase to Form a Diferric-Peroxide Intermediate. Journal of the American Chemical Society, 2013, 135, 15801-15812.	13.7	68
56	Electronic Structure of the Ferryl Intermediate in the Î±-Ketoglutarate Dependent Non-Heme Iron Halogenase SyrB2: Contributions to H Atom Abstraction Reactivity. Journal of the American Chemical Society, 2016, 138, 5110-5122.	13.7	68
57	Cryoreduction of the NO-Adduct of Taurine:Î±-Ketoglutarate Dioxygenase (TauD) Yields an Elusive {FeNO}⁸ Species. Journal of the American Chemical Society, 2010, 132, 4739-4751.	13.7	66
58	[20] Use of rapid kinetics methods to study the assembly of the diferric-tyrosyl radical cofactor of E. coli ribonucleotide reductase. Methods in Enzymology, 1995, 258, 278-303.	1.0	65
59	Rapid Reduction of the Diferric-Peroxyhemiacetal Intermediate in Aldehyde-Deformylating Oxygenase by a Cyanobacterial Ferredoxin: Evidence for a Free-Radical Mechanism. Journal of the American Chemical Society, 2015, 137, 11695-11709.	13.7	61
60	(Î¼-1,2-Peroxo)diiron(III/III) Complex as a Precursor to the Diiron(III/IV) Intermediate X in the Assembly of the Iron-Radical Cofactor of Ribonucleotide Reductase from Mouse. Biochemistry, 2007, 46, 1925-1932.	2.5	59
61	The manganese(IV)/iron(III) cofactor of Chlamydia trachomatis ribonucleotide reductase: structure, assembly, radical initiation, and evolution. Current Opinion in Structural Biology, 2008, 18, 650-657.	5.7	59
62	A Coupled Dinuclear Iron Cluster that Is Perturbed by Substrate Binding in myo-Inositol Oxygenase. Biochemistry, 2006, 45, 5393-5401.	2.5	58
63	The Active Form of Chlamydia trachomatis Ribonucleotide Reductase R2 Protein Contains a Heterodinuclear Mn(IV)/Fe(III) Cluster with S = 1 Ground State. Journal of the American Chemical Society, 2007, 129, 7504-7505.	13.7	57
64	Structural Analysis of the Mn(IV)/Fe(III) Cofactor of Chlamydia trachomatis Ribonucleotide Reductase by Extended X-ray Absorption Fine Structure Spectroscopy and Density Functional Theory Calculations. Journal of the American Chemical Society, 2008, 130, 15022-15027.	13.7	55
65	Function of the Diiron Cluster of <i>Escherichia coli</i> Class Ia Ribonucleotide Reductase in Proton-Coupled Electron Transfer. Journal of the American Chemical Society, 2013, 135, 8585-8593.	13.7	55
66	Peroxide Activation for Electrophilic Reactivity by the Binuclear Non-heme Iron Enzyme AurF. Journal of the American Chemical Society, 2017, 139, 7062-7070.	13.7	55
67	Variable Coordination Geometries at the Diiron(II) Active Site of Ribonucleotide Reductase R2. Journal of the American Chemical Society, 2003, 125, 15822-15830.	13.7	54
68	Oxygen Activation by a Mixed-Valent, Diiron(II/III) Cluster in the Glycol Cleavage Reaction Catalyzed by myo-Inositol Oxygenase. Biochemistry, 2006, 45, 5402-5412.	2.5	52
69	Formation and Function of the Manganese(IV)/Iron(III) Cofactor in <i>Chlamydia trachomatis</i> Ribonucleotide Reductase. Biochemistry, 2008, 47, 13736-13744.	2.5	52
70	Metal-free class Ie ribonucleotide reductase from pathogens initiates catalysis with a tyrosine-derived dihydroxyphenylalanine radical. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10022-10027.	7.1	49
71	Structural Characterization of the Peroxodiiron(III) Intermediate Generated during Oxygen Activation by the W48A/D84E Variant of Ribonucleotide Reductase Protein R2 fromEscherichia coliâ€. Biochemistry, 2003, 42, 13269-13279.	2.5	48
72	Organophosphonate-degrading PhnZ reveals an emerging family of HD domain mixed-valent diiron oxygenases. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18874-18879.	7.1	48

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73	Rapid-Freeze-Quench Magnetic Circular Dichroism of IntermediateXin Ribonucleotide Reductase:Â New Structural Insight. Journal of the American Chemical Society, 2003, 125, 11200-11201.	13.7	47
74	Branched Activation- and Catalysis-Specific Pathways for Electron Relay to the Manganese/Iron Cofactor in Ribonucleotide Reductase from <i>Chlamydia trachomatis</i>. Biochemistry, 2008, 47, 8477-8484.	2.5	47
75	Electron Relay in Proteins. Science, 2008, 320, 1730-1731.	12.6	44
76	Evidence That the Î² Subunit of <i>Chlamydia trachomatis</i> Ribonucleotide Reductase Is Active with the Manganese Ion of Its Manganese(IV)/Iron(III) Cofactor in Site 1. Journal of the American Chemical Society, 2012, 134, 2520-2523.	13.7	42
77	Substrate-Triggered Formation of a Peroxo-Fe₂(III/III) Intermediate during Fatty Acid Decarboxylation by UndA. Journal of the American Chemical Society, 2019, 141, 14510-14514.	13.7	42
78	O₂-Evolving Chlorite Dismutase as a Tool for Studying O₂-Utilizing Enzymes. Biochemistry, 2012, 51, 1607-1616.	2.5	39
79	Use of a Chemical Trigger for Electron Transfer to Characterize a Precursor to ClusterXin Assembly of the Iron-Radical Cofactor ofEscherichia coliRibonucleotide Reductaseâ€. Biochemistry, 2004, 43, 5953-5964.	2.5	38
80	Rapid and Quantitative Activation of Chlamydia trachomatis Ribonucleotide Reductase by Hydrogen Peroxide. Biochemistry, 2008, 47, 4477-4483.	2.5	38
81	Structural Basis for Superoxide Activation of <i>Flavobacterium johnsoniae</i> Class I Ribonucleotide Reductase and for Radical Initiation by Its Dimanganese Cofactor. Biochemistry, 2018, 57, 2679-2693.	2.5	38
82	The Nonribosomal Peptide Synthetase Enzyme DdaD Tethers <i>N</i>_{Î²}-Fumaramoyl-<scp>l</scp>-2,3-diaminopropionate for Fe(II)/Î±-Ketoglutarate-Dependent Epoxidation by DdaC during Dapdiamide Antibiotic Biosynthesis. Journal of the American Chemical Society, 2010, 132, 15773-15781.	13.7	35
83	Structural Basis for Assembly of the Mn^{IV}/Fe^{III} Cofactor in the Class Ic Ribonucleotide Reductase from <i>Chlamydia trachomatis</i>. Biochemistry, 2013, 52, 6424-6436.	2.5	35
84	Efficient Delivery of Long-Chain Fatty Aldehydes from the <i>Nostoc punctiforme</i> Acylâ€œAcyl Carrier Protein Reductase to Its Cognate Aldehyde-Deformylating Oxygenase. Biochemistry, 2015, 54, 1006-1015.	2.5	35
85	Hydrogen Donation but not Abstraction by a Tyrosine (Y68) during Endoperoxide Installation by Verruculogen Synthase (FtmOx1). Journal of the American Chemical Society, 2019, 141, 9964-9979.	13.7	35
86	A Peroxodiiron(III/III) Intermediate Mediating Both <i>N</i>-Hydroxylation Steps in Biosynthesis of the <i>N</i>-Nitrosourea Pharmacophore of Streptozotocin by the Multi-domain Metalloenzyme SznF. Journal of the American Chemical Society, 2020, 142, 11818-11828.	13.7	35
87	Geometric and Electronic Structure of the Mn(IV)Fe(III) Cofactor in Class Ic Ribonucleotide Reductase: Correlation to the Class Ia Binuclear Non-Heme Iron Enzyme. Journal of the American Chemical Society, 2013, 135, 17573-17584.	13.7	34
88	Installation of the Ether Bridge of Lolines by the Iron- and 2-Oxoglutarate-Dependent Oxygenase, LolO: Regio- and Stereochemistry of Sequential Hydroxylation and Oxacyclization Reactions. Biochemistry, 2018, 57, 2074-2083.	2.5	33
89	Heme biosynthesis depends on previously unrecognized acquisition of iron-sulfur cofactors in human amino-levulinic acid dehydratase. Nature Communications, 2020, 11, 6310.	12.8	32
90	Facile Electron Transfer during Formation of Cluster X and Kinetic Competence of X for Tyrosyl Radical Production in Protein R2 of Ribonucleotide Reductase from Mouseâ€. Biochemistry, 2002, 41, 981-990.	2.5	31

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91	Oâ€“H Activation by an Unexpected Ferryl Intermediate during Catalysis by 2-Hydroxyethylphosphonate Dioxygenase. Journal of the American Chemical Society, 2017, 139, 2045-2052.	13.7	31
92	Structure and assembly of the diiron cofactor in the heme-oxygenaseâ€“like domain of the <i>N</i> -nitrosoureaâ€“producing enzyme SznF. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	31
93	Î±-Amine Desaturation of <scp>d</scp>-Arginine by the Iron(II)- and 2-(Oxo)glutarate-Dependent <scp>l</scp>-Arginine 3-Hydroxylase, VioC. Biochemistry, 2018, 57, 6479-6488.	2.5	30
94	Evidence for a Di-Î¼-oxo Diamond Core in the Mn(IV)/Fe(IV) Activation Intermediate of Ribonucleotide Reductase from <i>Chlamydia trachomatis</i>. Journal of the American Chemical Society, 2017, 139, 1950-1957.	13.7	28
95	Evidence for Modulation of Oxygen Rebound Rate in Control of Outcome by Iron(II)- and 2-Oxoglutarate-Dependent Oxygenases. Journal of the American Chemical Society, 2019, 141, 15153-15165.	13.7	28
96	A New Microbial Pathway for Organophosphonate Degradation Catalyzed by Two Previously Misannotated Non-Heme-Iron Oxygenases. Biochemistry, 2019, 58, 1627-1647.	2.5	28
97	Frontiers in enzymatic Câ€“H-bond activation. Current Opinion in Chemical Biology, 2009, 13, 51-57.	6.1	27
98	Two Distinct Mechanisms of Inactivation of the Class Ic Ribonucleotide Reductase from<i>Chlamydia trachomatis</i>by Hydroxyurea: Implications for the Protein Gating of Intersubunit Electron Transfer. Biochemistry, 2010, 49, 5340-5349.	2.5	26
99	Getting the metal right. Nature, 2010, 465, 40-41.	27.8	25
100	Nuclear Resonance Vibrational Spectroscopic Definition of the Facial Triad Fe^{IV}â•O Intermediate in Taurine Dioxygenase: Evaluation of Structural Contributions to Hydrogen Atom Abstraction. Journal of the American Chemical Society, 2020, 142, 18886-18896.	13.7	23
101	Emerging Structural and Functional Diversity in Proteins With Dioxygen-Reactive Dinuclear Transition Metal Cofactors. , 2020, , 215-250.		23
102	Structure of a Ferryl Mimic in the Archetypal Iron(II)- and 2-(Oxo)-glutarate-Dependent Dioxygenase, TauD. Biochemistry, 2019, 58, 4218-4223.	2.5	22
103	Vanadyl as a Stable Structural Mimic of Reactive Ferryl Intermediates in Mononuclear Nonheme-Iron Enzymes. Inorganic Chemistry, 2017, 56, 13382-13389.	4.0	19
104	High-resolution iron X-ray absorption spectroscopic and computational studies of non-heme diiron peroxo intermediates. Journal of Inorganic Biochemistry, 2020, 203, 110877.	3.5	19
105	Mediation by Indole Analogues of Electron Transfer during Oxygen Activation in Variants ofEscherichia coliRibonucleotide Reductase R2 Lacking the Electron-Shuttling Tryptophan 48â€. Biochemistry, 2004, 43, 5943-5952.	2.5	18
106	An Iron(IV)â€“Oxo Intermediate Initiating <scp>l</scp>-Arginine Oxidation but Not Ethylene Production by the 2-Oxoglutarate-Dependent Oxygenase, Ethylene-Forming Enzyme. Journal of the American Chemical Society, 2021, 143, 2293-2303.	13.7	18
107	Molecular basis for enantioselective herbicide degradation imparted by aryloxyalkanoate dioxygenases in transgenic plants. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 13299-13304.	7.1	17
108	Demonstration by2H ENDOR Spectroscopy thatmyo-Inositol Binds via an Alkoxide Bridge to the Mixed-Valent Diiron Center ofmyo-Inositol Oxygenase. Journal of the American Chemical Society, 2006, 128, 10374-10375.	13.7	16

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109	Cation Mediation of Radical Transfer between Trp48 and Tyr356 during O2 Activation by Protein R2 of Escherichia coli Ribonucleotide Reductase:â€‰ Relevance to R1âˆ’R2 Radical Transfer in Nucleotide Reduction?. Biochemistry, 2006, 45, 8823-8830.	2.5	15
110	Novel approaches for the accumulation of oxygenated intermediates to multi-millimolar concentrations. Coordination Chemistry Reviews, 2013, 257, 234-243.	18.8	15
111	Twoâ€•Color Valenceâ€•toâ€•Core Xâ€•ray Emission Spectroscopy Tracks Cofactor Protonation State in a Class I Ribonucleotide Reductase. Angewandte Chemie - International Edition, 2018, 57, 12754-12758.	13.8	15
112	A mixed-valent Fe(II)Fe(III) species converts cysteine to an oxazolone/thioamide pair in methanobactin biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2123566119.	7.1	14
113	Substrate-Triggered Î¼-Peroxodiiron(III) Intermediate in the 4-Chloro-<scp>l</scp>-Lysine-Fragmenting Heme-Oxygenase-like Diiron Oxidase (HDO) BesC: Substrate Dissociation from, and C4 Targeting by, the Intermediate. Biochemistry, 2022, 61, 689-702.	2.5	13
114	Freeze-quench 57Fe-MÃ¶ssbauer spectroscopy: trapping reactive intermediates. Photosynthesis Research, 2009, 102, 295-304.	2.9	12
115	Steric Enforcement of <i>cis</i>-Epoxide Formation in the Radical Câ€“O-Coupling Reaction by Which (<i>S</i>)-2-Hydroxypropylphosphonate Epoxidase (HppE) Produces Fosfomycin. Journal of the American Chemical Society, 2019, 141, 20397-20406.	13.7	12
116	Lifetimes of the Aglycone Substrates of Specifier Proteins, the Autonomous Iron Enzymes That Dictate the Products of the Glucosinolate-Myrosinase Defense System in Brassica Plants. Biochemistry, 2020, 59, 2432-2441.	2.5	12
117	Use of Noncanonical Tyrosine Analogues to Probe Control of Radical Intermediates during Endoperoxide Installation by Verruculogen Synthase (FtmOx1). ACS Catalysis, 2022, 12, 6968-6979.	11.2	12
118	Hybrid radical-polar pathway for excision of ethylene from 2-oxoglutarate by an iron oxygenase. Science, 2021, 373, 1489-1493.	12.6	11
119	Direct Measurement of the Radical Translocation Distance in the Class I Ribonucleotide Reductase from <i>Chlamydia trachomatis</i>. Journal of Physical Chemistry B, 2015, 119, 13777-13784.	2.6	10
120	Circular Dichroism, Magnetic Circular Dichroism, and Variable Temperature Variable Field Magnetic Circular Dichroism Studies of Biferrous and Mixed-Valent <i>myo</i>-Inositol Oxygenase: Insights into Substrate Activation of O₂ Reactivity. Journal of the American Chemical Society, 2013, 135, 15851-15863.	13.7	8
121	Assembly of the unusual oxacycles in the orthosomycin antibiotics. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 11989-11990.	7.1	8
122	Radical-Translocation Intermediates and Hurdling of Pathway Defects in â€œSuper-oxidizedâ€• (Mn^{IV}/Fe^{IV}) <i>Chlamydia trachomatis</i> Ribonucleotide Reductase. Journal of the American Chemical Society, 2012, 134, 20498-20506.	13.7	7
123	Addition of Oxygen to the Diiron(II/II) Cluster Is the Slowest Step in Formation of the Tyrosyl Radical in the W103Y Variant of Ribonucleotide Reductase Protein R2 from Mouse. Biochemistry, 2007, 46, 13067-13073.	2.5	5
124	Remote Enzyme Microsurgery. Science, 2010, 327, 1337-1338.	12.6	3
125	Synthesis of 6,6â€•and 7,7â€•Difluoroâ€•1â€•acetamidopyrrolizidines and Their Oxidation Catalyzed by the Nonheme Fe Oxygenase LolO. ChemBioChem, 2022, 23, .	2.6	3
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#	Article	IF	Citations
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