

# Troy A Stich

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Trapping and Electron Paramagnetic Resonance Characterization of the 5-Ado Radical in a Radical <i>S</i> -Adenosyl Methionine Enzyme Reaction with a Non-Native Substrate. ACS Central Science, 2019, 5, 1777-1785.	5.3	49
2	Metal Bonding with 3d and 6d Orbitals: An EPR and ENDOR Spectroscopic Investigation of Ti <sup>3+</sup> and Th <sup>3+</sup> Al Heterobimetallic Complexes. Inorganic Chemistry, 2019, 58, 7978-7988.	1.9	14
3	Effects of Lewis Acidic Metal Ions (M) on Oxygen-Atom Transfer Reactivity of Heterometallic Mn <sub>3</sub> MO <sub>4</sub> Cubane and Fe <sub>3</sub> MO(OH) and Mn <sub>3</sub> MO(OH) Clusters. Inorganic Chemistry, 2019, 58, 2336-2345.	1.9	21
4	EPR Evidence for the Origin of Nonlinear Effects in an Enantioselective Cu(II)-Catalyzed Spiroannulation. ACS Catalysis, 2019, 9, 1224-1230.	5.5	19
5	X-ray and EPR Characterization of the Auxiliary Fe-S Clusters in the Radical SAM Enzyme PqqE. Biochemistry, 2018, 57, 1306-1315.	1.2	31
6	Structural Effects of Ammonia Binding to the Mn <sub>4</sub> CaO <sub>5</sub> Cluster of Photosystem II. Journal of Physical Chemistry B, 2018, 122, 1588-1599.	1.2	26
7	EPR-Derived Structure of a Paramagnetic Intermediate Generated by Biotin Synthase BioB. Journal of the American Chemical Society, 2018, 140, 12947-12963.	6.6	13
8	An Aminoimidazole Radical Intermediate in the Anaerobic Biosynthesis of the 5,6-Dimethylbenzimidazole Ligand to Vitamin B12. Journal of the American Chemical Society, 2018, 140, 12798-12807.	6.6	9
9	Mn(III) species formed by the multi-copper oxidase MnxG investigated by electron paramagnetic resonance spectroscopy. Journal of Biological Inorganic Chemistry, 2018, 23, 1093-1104.	1.1	8
10	Copper Binding Sites in the Manganese-Oxidizing Mnx Protein Complex Investigated by Electron Paramagnetic Resonance Spectroscopy. Journal of the American Chemical Society, 2017, 139, 8868-8877.	6.6	14
11	Mn(II) Oxidation by the Multicopper Oxidase Complex Mnx: A Coordinated Two-Stage Mn(II)/(III) and Mn(III)/(IV) Mechanism. Journal of the American Chemical Society, 2017, 139, 11381-11391.	6.6	58
12	Mn(II) Oxidation by the Multicopper Oxidase Complex Mnx: A Binuclear Activation Mechanism. Journal of the American Chemical Society, 2017, 139, 11369-11380.	6.6	39
13	Insertion of a Transient Tin Nitride into Carbon-Carbon and Boron-Carbon Bonds. Inorganic Chemistry, 2017, 56, 14596-14604.	1.9	9
14	Electron Paramagnetic Resonance Characterization of Dioxygen-Bridged Cobalt Dimers with Relevance to Water Oxidation. Inorganic Chemistry, 2016, 55, 12728-12736.	1.9	11
15	EPR Spectroscopic Characterization of a Jahn-Teller Distorted (C <sub>3v</sub> ) Four-Coordinate Chromium(V) Oxo Species. Israel Journal of Chemistry, 2016, 56, 864-871.	1.0	2
16	Dispersion-Force-Assisted Disproportionation: A Stable Two-Coordinate Copper(II) Complex. Angewandte Chemie - International Edition, 2016, 55, 10444-10447.	7.2	33
17	Dispersion-Force-Assisted Disproportionation: A Stable Two-Coordinate Copper(II) Complex. Angewandte Chemie, 2016, 128, 10600-10603.	1.6	10
18	Biophysical Characterization of Fluorotyrosine Probes Site-Specifically Incorporated into Enzymes: <i>E. coli</i> Ribonucleotide Reductase As an Example. Journal of the American Chemical Society, 2016, 138, 7951-7964.	6.6	43

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19	Advanced Electron Paramagnetic Resonance Studies of the Oxygen-Evolving Complex. , 2015, , 1-58.		1
20	Manganese Binding Properties of Human Calprotectin under Conditions of High and Low Calcium: X-ray Crystallographic and Advanced Electron Paramagnetic Resonance Spectroscopic Analysis. Journal of the American Chemical Society, 2015, 137, 3004-3016.	6.6	65
21	Biochemical and EPR-Spectroscopic Investigation into Heterologously Expressed Vinyl Chloride Reductive Dehalogenase (VcrA) from <i>Dehalococcoides mccartyi</i> Strain VS. Journal of the American Chemical Society, 2015, 137, 3525-3532.	6.6	70
22	Metal ion oxidation state assignment based on coordinating ligand hyperfine interaction. Photosynthesis Research, 2015, 124, 7-18.	1.6	7
23	Ammonia Binds to the Dangler Manganese of the Photosystem II Oxygen-Evolving Complex. Journal of the American Chemical Society, 2015, 137, 8829-8837.	6.6	70
24	An Mn(V)â€‘oxo role in splitting water?. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 5265-5266.	3.3	25
25	Mn(II) Binding and Subsequent Oxidation by the Multicopper Oxidase MnxG Investigated by Electron Paramagnetic Resonance Spectroscopy. Journal of the American Chemical Society, 2015, 137, 10563-10575.	6.6	17
26	Pulse Electron Paramagnetic Resonance Studies of the Interaction of Methanol with the S<sub>2</sub> State of the Mn<sub>4</sub>O<sub>5</sub>Ca Cluster of Photosystem II. Biochemistry, 2014, 53, 7914-7928.	1.2	42
27	The HydG Enzyme Generates an Fe(CO) <sub>2</sub> (CN) Synthron in Assembly of the FeFe Hydrogenase H-Cluster. Science, 2014, 343, 424-427.	6.0	109
28	The Cyanide Ligands of [FeFe] Hydrogenase: Pulse EPR Studies of <sup>13</sup> C and <sup>15</sup> N-Labeled H-Cluster. Journal of the American Chemical Society, 2014, 136, 12237-12240.	6.6	37
29	Paramagnetic Intermediates Generated by Radical S-Adenosylmethionine (SAM) Enzymes. Accounts of Chemical Research, 2014, 47, 2235-2243.	7.6	19
30	Role of oxido incorporation and ligand lability in expanding redox accessibility of structurally related Mn <sub>4</sub> clusters. Chemical Science, 2013, 4, 3986.	3.7	40
31	Structural insights into [Co <sub>4</sub> O <sub>4</sub> (C <sub>5</sub> H <sub>5</sub> N) <sub>4</sub> (CH <sub>3</sub> CO <sub>2</sub> ) <sub>4</sub> ] <sup>+</sup> , a rare Co(IV)-containing cuboidal complex. Polyhedron, 2013, 64, 304-307.	1.0	12
32	Electron Paramagnetic Resonance Analysis of a Transient Species Formed During Water Oxidation Catalyzed by the Complex Ion [(bpy) <sub>2</sub> Ru(OH<sub>2</sub>)]<sub>2</sub>O<sup>4+</sup>. Inorganic Chemistry, 2013, 52, 4578-4586.	1.9	24
33	Mechanism of Assembly of the Dimanganese-Tyrosyl Radical Cofactor of Class Ib Ribonucleotide Reductase: Enzymatic Generation of Superoxide Is Required for Tyrosine Oxidation via a Mn(III)Mn(IV) Intermediate. Journal of the American Chemical Society, 2013, 135, 4027-4039.	6.6	97
34	A Radical Intermediate in Tyrosine Scission to the CO and CN <sup>âˆ’</sup> Ligands of FeFe Hydrogenase. Science, 2013, 342, 472-475.	6.0	107
35	Synthetic model of the asymmetric [Mn <sub>3</sub> CaO <sub>4</sub> ] cubane core of the oxygen-evolving complex of photosystem II. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2257-2262.	3.3	259
36	Redox, haem and CO in enzymatic catalysis and regulation. Biochemical Society Transactions, 2012, 40, 501-507.	1.6	13

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37	Comparison of cobalt and manganese in the chemistry of water oxidation. <i>Coordination Chemistry Reviews</i> , 2012, 256, 2445-2452.	9.5	83
38	9-Mercaptodethiobiotin Is Generated as a Ligand to the $[2\text{Fe}^{\text{II}}\text{S}]^+$ Cluster during the Reaction Catalyzed by Biotin Synthase from <i>Escherichia coli</i> . <i>Journal of the American Chemical Society</i> , 2012, 134, 9042-9045.	6.6	36
39	A High-Spin Iron(IV) $\mu$ -Oxo Complex Supported by a Trigonal Nonheme Pyrrolide Platform. <i>Journal of the American Chemical Society</i> , 2012, 134, 1536-1542.	6.6	129
40	Comparison of Two Yeast MnSODs: Mitochondrial <i>Saccharomyces cerevisiae</i> versus Cytosolic <i>Candida albicans</i> . <i>Journal of the American Chemical Society</i> , 2011, 133, 20878-20889.	6.6	37
41	Ligation of D1-His332 and D1-Asp170 to the Manganese Cluster of Photosystem II from <i>Synechocystis</i> Assessed by Multifrequency Pulse EPR Spectroscopy. <i>Biochemistry</i> , 2011, 50, 7390-7404.	1.2	63
42	Electronic Structure Description of a $[\text{Co}(\text{III})_3\text{Co}(\text{IV})\text{O}_4]$ Cluster: A Model for the Paramagnetic Intermediate in Cobalt-Catalyzed Water Oxidation. <i>Journal of the American Chemical Society</i> , 2011, 133, 15444-15452.	6.6	155
43	EPR Evidence for Co(IV) Species Produced During Water Oxidation at Neutral pH. <i>Journal of the American Chemical Society</i> , 2010, 132, 6882-6883.	6.6	488
44	Infrared and EPR Spectroscopic Characterization of a Ni(I) Species Formed by Photolysis of a Catalytically Competent Ni(I)-CO Intermediate in the Acetyl-CoA Synthase Reaction. <i>Biochemistry</i> , 2010, 49, 7516-7523.	1.2	41
45	Solid-State $^{55}\text{Mn}$ NMR Spectroscopy of Bis( $\mu$ -oxo)dimanganese(IV) $[\text{Mn}_2\text{O}_2(\text{salpn})_2]$ , a Model for the Oxygen Evolving Complex in Photosystem II. <i>Journal of the American Chemical Society</i> , 2010, 132, 16727-16729.	6.6	9
46	Multifrequency EPR Studies of Manganese Catalases Provide a Complete Description of Proteinaceous Nitrogen Coordination. <i>Journal of Physical Chemistry B</i> , 2010, 114, 14178-14188.	1.2	31
47	Investigation of the Highly Active Manganese Superoxide Dismutase from <i>Saccharomyces cerevisiae</i> . <i>Journal of the American Chemical Society</i> , 2010, 132, 12525-12527.	6.6	24
48	$^{13}\text{C}$ ENDOR Reveals That the D1 Polypeptide C-Terminus Is Directly Bound to Mn in the Photosystem II Oxygen Evolving Complex. <i>Journal of the American Chemical Society</i> , 2010, 132, 446-447.	6.6	31
49	Unusual magnetic properties of a two-coordinate heteroleptic linear cobalt(II) complex. <i>Chemical Communications</i> , 2010, 46, 4466.	2.2	37
50	Direct Spectroscopic Observation of Large Quenching of First-Order Orbital Angular Momentum with Bending in Monomeric, Two-Coordinate Fe(II) Primary Amido Complexes and the Profound Magnetic Effects of the Absence of Jahn-Teller and Renner-Teller Distortions in Rigorously Linear Coordination. <i>Journal of the American Chemical Society</i> , 2009, 131, 12693-12702.	6.6	87
51	Reduction of terphenyl iron(II) or cobalt(II) halides in the presence of trimethylphosphine: an unusual triple dehydrogenation of an alkyl group. <i>Dalton Transactions</i> , 2009, , 5401.	1.6	15
52	Multifrequency pulsed EPR studies of biologically relevant manganese(II) complexes. <i>Applied Magnetic Resonance</i> , 2007, 31, 321-341.	0.6	65
53	Spectroscopic Studies of the Corrinoid/Iron-Sulfur Protein from <i>Moorella thermoacetica</i> . <i>Journal of the American Chemical Society</i> , 2006, 128, 5010-5020.	6.6	51
54	Spectroscopic and Computational Studies of the ATP:Corrinoid Adenosyltransferase (CobA) from <i>Salmonella enterica</i> : Insights into the Mechanism of Adenosylcobalamin Biosynthesis. <i>Journal of the American Chemical Society</i> , 2005, 127, 8710-8719.	6.6	90

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55	Spectroscopic Evidence for the Formation of a Four-Coordinate Co <sup>2+</sup> Cobalamin Species upon Binding to the Human ATP:Cobalamin Adenosyltransferase. <i>Journal of the American Chemical Society</i> , 2005, 127, 7660-7661.	6.6	94
56	Spectroscopic and Computational Studies of Co <sup>2+</sup> Corrinoids: Spectral and Electronic Properties of the Biologically Relevant Base-On and Base-Off Forms of Co <sup>2+</sup> Cobalamin. <i>Journal of the American Chemical Society</i> , 2004, 126, 9735-9749.	6.6	120
57	Spectroscopic and Computational Studies of Co <sup>3+</sup> Corrinoids: Spectral and Electronic Properties of the B <sub>12</sub> Cofactors and Biologically Relevant Precursors. <i>Journal of the American Chemical Society</i> , 2003, 125, 5897-5914.	6.6	122