Troy A Stich

List of Publications by Year
in descending order

57	3,231	147726 31	149623 56
papers	citations	h-index	g-index

57	57	57	4085
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	EPR Evidence for Co(IV) Species Produced During Water Oxidation at Neutral pH. Journal of the American Chemical Society, 2010, 132, 6882-6883.	6.6	488
2	Synthetic model of the asymmetric [Mn ₃ CaO ₄] 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
3	Electronic Structure Description of a [Co(III)₃Co(IV)O₄] Cluster: A Model for the Paramagnetic Intermediate in Cobalt-Catalyzed Water Oxidation. Journal of the American Chemical Society, 2011, 133, 15444-15452.	6.6	155
4	A High-Spin Iron(IV)â€“Oxo Complex Supported by a Trigonal Nonheme Pyrrolide Platform. Journal of the American Chemical Society, 2012, 134, 1536-1542.	6.6	129
5	Spectroscopic and Computational Studies of Co3+-Corrinoids:Â Spectral and Electronic Properties of the B12Cofactors and Biologically Relevant Precursors. Journal of the American Chemical Society, 2003, 125, 5897-5914.	6.6	122
6	Spectroscopic and Computational Studies of Co2+Corrinoids:Â Spectral and Electronic Properties of the Biologically Relevant Base-On and Base-Off Forms of Co2+Cobalamin. Journal of the American Chemical Society, 2004, 126, 9735-9749.	6.6	120
7	The HydG Enzyme Generates an Fe(CO) ₂ (CN) Synthon in Assembly of the FeFe Hydrogenase H-Cluster. Science, 2014, 343, 424-427.	6.0	109
8	A Radical Intermediate in Tyrosine Scission to the CO and CN ^{â˙} Ligands of FeFe Hydrogenase. Science, 2013, 342, 472-475.	6.0	107
9	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
10	Spectroscopic Evidence for the Formation of a Four-Coordinate Co2+Cobalamin Species upon Binding to the Human ATP:Cobalamin Adenosyltransferase. Journal of the American Chemical Society, 2005, 127, 7660-7661.	6.6	94
11	Spectroscopic and Computational Studies of the ATP:Corrinoid Adenosyltransferase (CobA) fromSalmonella enterica:Â Insights into the Mechanism of Adenosylcobalamin Biosynthesis. Journal of the American Chemical Society, 2005, 127, 8710-8719.	6.6	90
12	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 Jahnâ˙ and Rennerâ˙Teller Distortions in Rigorously Linear Coordination. Journal of the American Chemical Society, 2009, 131, 12693-12702.	6.6	87
13	Comparison of cobalt and manganese in the chemistry of water oxidation. Coordination Chemistry Reviews, 2012, 256, 2445-2452.	9.5	83
14	Biochemical and EPR-Spectroscopic Investigation into Heterologously Expressed Vinyl Chloride Reductive Dehalogenase (VcrA) from Dehalococcoides mccartyi Strain VS. Journal of the American Chemical Society, 2015, 137, 3525-3532.	6.6	70
15	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
16	Multifrequency pulsed EPR studies of biologically relevant manganese(II) complexes. Applied Magnetic Resonance, 2007, 31, 321-341.	0.6	65
17	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
18	Ligation of D1-His332 and D1-Asp170 to the Manganese Cluster of Photosystem II from Synechocystis Assessed by Multifrequency Pulse EPR Spectroscopy. Biochemistry, 2011, 50, 7390-7404.	1.2	63

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19	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
20	Spectroscopic Studies of the Corrinoid/Ironâ"Sulfur Protein fromMoorella thermoacetica. Journal of the American Chemical Society, 2006, 128, 5010-5020.	6.6	51
21	Trapping and Electron Paramagnetic Resonance Characterization of the 5â€²dAdo^{â€¢} Radical in a Radical S-Adenosyl Methionine Enzyme Reaction with a Non-Native Substrate. ACS Central Science, 2019, 5, 1777-1785.	5.3	49
22	Biophysical Characterization of Fluorotyrosine Probes Site-Specifically Incorporated into Enzymes: E. coli Ribonucleotide Reductase As an Example. Journal of the American Chemical Society, 2016, 138, 7951-7964.	6.6	43
23	Pulse Electron Paramagnetic Resonance Studies of the Interaction of Methanol with the S₂ State of the Mn₄O₅Ca Cluster of Photosystem II. Biochemistry, 2014, 53, 7914-7928.	1.2	42
24	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. Biochemistry, 2010, 49, 7516-7523.	1.2	41
25	Role of oxido incorporation and ligand lability in expanding redox accessibility of structurally related Mn4 clusters. Chemical Science, 2013, 4, 3986.	3.7	40
26	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
27	Unusual magnetic properties of a two-coordinate heteroleptic linear cobalt(ii) complex. Chemical Communications, 2010, 46, 4466.	2.2	37
28	Comparison of Two Yeast MnSODs: Mitochondrial Saccharomyces cerevisiae versus Cytosolic Candida albicans. Journal of the American Chemical Society, 2011, 133, 20878-20889.	6.6	37
29	The Cyanide Ligands of [FeFe] Hydrogenase: Pulse EPR Studies of 13C and 15N-Labeled H-Cluster. Journal of the American Chemical Society, 2014, 136, 12237-12240.	6.6	37
30	9-Mercaptodethiobiotin Is Generated as a Ligand to the [2Feâ€"2S]⁺ Cluster during the Reaction Catalyzed by Biotin Synthase from Escherichia coli. Journal of the American Chemical Society, 2012, 134, 9042-9045.	6.6	36
31	Dispersionâ€Forceâ€Assisted Disproportionation: A Stable Twoâ€Coordinate Copper(II) Complex. Angewandte Chemie - International Edition, 2016, 55, 10444-10447.	7.2	33
32	Multifrequency EPR Studies of Manganese Catalases Provide a Complete Description of Proteinaceous Nitrogen Coordination. Journal of Physical Chemistry B, 2010, 114, 14178-14188.	1.2	31
33	¹³C ENDOR Reveals That the D1 Polypeptide C-Terminus Is Directly Bound to Mn in the Photosystem II Oxygen Evolving Complex. Journal of the American Chemical Society, 2010, 132, 446-447.	6.6	31
34	X-ray and EPR Characterization of the Auxiliary Feâ€"S Clusters in the Radical SAM Enzyme PqqE. Biochemistry, 2018, 57, 1306-1315.	1.2	31
35	Structural Effects of Ammonia Binding to the Mn₄CaO₅ Cluster of Photosystem II. Journal of Physical Chemistry B, 2018, 122, 1588-1599.	1.2	26
36	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

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37	Investigation of the Highly Active Manganese Superoxide Dismutase fromSaccharomyces cerevisiae. Journal of the American Chemical Society, 2010, 132, 12525-12527.	6.6	24
38	Electron Paramagnetic Resonance Analysis of a Transient Species Formed During Water Oxidation Catalyzed by the Complex Ion [(bpy)₂Ru(OH₂)]₂O⁴⁺. Inorganic Chemistry, 2013, 52, 4578-4586.	1.9	24
39	Effects of Lewis Acidic Metal Ions (M) on Oxygen-Atom Transfer Reactivity of Heterometallic Mn₃MO₄ Cubane and Fe₃MO(OH) and Mn₃MO(OH) Clusters. Inorganic Chemistry, 2019, 58, 2336-2345.	1.9	21
40	Paramagnetic Intermediates Generated by Radical S-Adenosylmethionine (SAM) Enzymes. Accounts of Chemical Research, 2014, 47, 2235-2243.	7.6	19
41	EPR Evidence for the Origin of Nonlinear Effects in an Enantioselective Cu(II)-Catalyzed Spiroannulation. ACS Catalysis, 2019, 9, 1224-1230.	5.5	19
42	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
43	Reduction of terphenyl iron(ii) or cobalt(ii) halides in the presence of trimethylphosphine: an unusual triple dehydrogenation of an alkyl group. Dalton Transactions, 2009, , 5401.	1.6	15
44	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
45	Metal Bonding with 3d and 6d Orbitals: An EPR and ENDOR Spectroscopic Investigation of Ti³⁺â€“Al and Th³⁺â€“Al Heterobimetallic Complexes. Inorganic Chemistry, 2019, 58, 7978-7988.	1.9	14
46	Redox, haem and CO in enzymatic catalysis and regulation. Biochemical Society Transactions, 2012, 40, 501-507.	1.6	13
47	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
48	Structural insights into [Co4O4(C5H5N)4(CH3CO2)4]+, a rare Co(IV)-containing cuboidal complex. Polyhedron, 2013, 64, 304-307.	1.0	12
49	Electron Paramagnetic Resonance Characterization of Dioxygen-Bridged Cobalt Dimers with Relevance to Water Oxidation. Inorganic Chemistry, 2016, 55, 12728-12736.	1.9	11
50	Dispersionâ€Forceâ€Assisted Disproportionation: A Stable Twoâ€Coordinate Copper(II) Complex. Angewandte Chemie, 2016, 128, 10600-10603.	1.6	10
51	Solid-State55Mn NMR Spectroscopy of Bis(Î¼-oxo)dimanganese(IV) [Mn2O2(salpn)2], a Model for the Oxygen Evolving Complex in Photosystem II. Journal of the American Chemical Society, 2010, 132, 16727-16729.	6.6	9
52	Insertion of a Transient Tin Nitride into Carbonâ€“Carbon and Boronâ€“Carbon Bonds. Inorganic Chemistry, 2017, 56, 14596-14604.	1.9	9
53	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
54	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

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55	Metal ion oxidation state assignment based on coordinating ligand hyperfine interaction. Photosynthesis Research, 2015, 124, 7-18.	1.6	7
56	EPR Spectroscopic Characterization of a Jahnâ€Teller Distorted (C 3 v â† C s) Fourâ€Coordinate Chromium(V) Oxo Species. Israel Journal of Chemistry, 2016, 56, 864-871.	1.0	2
57	Advanced Electron Paramagnetic Resonance Studies of the Oxygen-Evolving Complex. , 2015, , 1-58.		1