Sean J Elliott

List of Publications by Year
in descending order

83 papers	3,490 citations	147801 31 h-index	144013 57 g-index
85 all docs	85 docs citations	85 times ranked	3806 citing authors

#	Article	IF	Citations
1	Chemogenomic profiling on a genome-wide scale using reverse-engineered gene networks. Nature Biotechnology, 2005, 23, 377-383.	17.5	330
2	Enzyme Electrokinetics:Â Using Protein Film Voltammetry To Investigate Redox Enzymes and Their Mechanismsâ€. Biochemistry, 2003, 42, 8653-8662.	2.5	266
3	The Particulate Methane Monooxygenase from Methylococcus capsulatus (Bath) Is a Novel Copper-containing Three-subunit Enzyme. Journal of Biological Chemistry, 1998, 273, 7957-7966.	3.4	199
4	Electrochemical interrogations of the Mtr cytochromes from Shewanella: opening a potential window. Journal of Biological Inorganic Chemistry, 2008, 13, 849-854.	2.6	168
5	Regio- and Stereoselectivity of Particulate Methane Monooxygenase fromMethylococcus capsulatus(Bath). Journal of the American Chemical Society, 1997, 119, 9949-9955.	13.7	153
6	Silver Nanoparticle-Catalyzed Dielsâˆ’Alder Cycloadditions of 2â€²-Hydroxychalcones. Journal of the American Chemical Society, 2010, 132, 7514-7518.	13.7	131
7	X-ray Absorption and EPR Studies on the Copper Ions Associated with the Particulate Methane Monooxygenase fromMethylococcus capsulatus(Bath). Cu(I) Ions and Their Implications. Journal of the American Chemical Society, 1996, 118, 12766-12776.	13.7	120
8	Alternative FeS cluster ligands: tuning redox potentials and chemistry. Current Opinion in Chemical Biology, 2014, 19, 50-58.	6.1	111
9	A Voltammetric Study of Interdomain Electron Transfer within Sulfite Oxidase. Journal of the American Chemical Society, 2002, 124, 11612-11613.	13.7	90
10	Voltammetric Studies of the Catalytic Mechanism of the Respiratory Nitrate Reductase fromEscherichia coli:Â How Nitrate Reduction and Inhibition Depend on the Oxidation State of the Active Siteâ€. Biochemistry, 2004, 43, 799-807.	2.5	88
11	Multi-heme proteins: Nature's electronic multi-purpose tool. Biochimica Et Biophysica Acta - Bioenergetics, 2013, 1827, 938-948.	1.0	82
12	Spectroscopic and Electrochemical Characterization of the Ironâ€“Sulfur and Cobalamin Cofactors of TsrM, an Unusual Radical <i>S</i>-Adenosylmethionine Methylase. Journal of the American Chemical Society, 2016, 138, 3416-3426.	13.7	77
13	Bioinformatic and Biochemical Characterizations of Câ€“S Bond Formation and Cleavage Enzymes in the Fungus <i>Neurospora crassa</i> Ergothioneine Biosynthetic Pathway. Organic Letters, 2014, 16, 5382-5385.	4.6	74
14	Crystallographic trapping in the rebeccamycin biosynthetic enzyme RebC. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15311-15316.	7.1	72
15	Redox Characterization of the FeS Protein MitoNEET and Impact of Thiazolidinedione Drug Binding. Biochemistry, 2009, 48, 10193-10195.	2.5	68
16	Proteinâ€“Protein Interaction Regulates the Direction of Catalysis and Electron Transfer in a Redox Enzyme Complex. Journal of the American Chemical Society, 2013, 135, 10550-10556.	13.7	68
17	Structures of benzylsuccinate synthase elucidate roles of accessory subunits in glycyl radical enzyme activation and activity. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10161-10166.	7.1	55
18	Tools for resolving complexity in the electron transfer networks of multiheme cytochromes c. Metallomics, 2011, 3, 344.	2.4	52

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19	The Copper Clusters in the Particulate Methane Monooxygenase (pMMO) from <i>Methylococcus Capsulatus</i> (Bath). Journal of the Chinese Chemical Society, 2004, 51, 1081-1098.	1.4	50
20	Laue crystal structure of Shewanella oneidensis cytochrome c nitrite reductase from a high-yield expression system. Journal of Biological Inorganic Chemistry, 2012, 17, 647-662.	2.6	50
21	Metalloprotein switches that display chemical-dependent electron transfer in cells. Nature Chemical Biology, 2019, 15, 189-195.	8.0	46
22	MacA is a Second Cytochrome <i>c</i> Peroxidase of <i>Geobacter sulfurreducens</i>. Biochemistry, 2012, 51, 2747-2756.	2.5	44
23	Electrochemical Resolution of the [4Fe-4S] Centers of the AdoMet Radical Enzyme BtrN: Evidence of Proton Coupling and an Unusual, Low-Potential Auxiliary Cluster. Journal of the American Chemical Society, 2015, 137, 8664-8667.	13.7	43
24	Pulsed EPR Studies of Particulate Methane Monooxygenase fromMethylococcus Capsulatus(Bath):Â Evidence for Histidine Ligation. Journal of the American Chemical Society, 1998, 120, 3247-3248.	13.7	42
25	Conserved Hydrogen Bonding Networks of MitoNEET Tune Fe-S Cluster Binding and Structural Stability. Biochemistry, 2013, 52, 4687-4696.	2.5	42
26	Detection and interpretation of redox potential optima in the catalytic activity of enzymes. Biochimica Et Biophysica Acta - Bioenergetics, 2002, 1555, 54-59.	1.0	41
27	Heme Attachment Motif Mobility Tunes Cytochrome c Redox Potential. Biochemistry, 2007, 46, 11753-11760.	2.5	41
28	The Diheme Cytochrome <i>c</i> Peroxidase from <i>Shewanella oneidensis</i> Requires Reductive Activation. Biochemistry, 2012, 51, 974-985.	2.5	38
29	A Distinctive Electrocatalytic Response from the Cytochrome c Peroxidase of Nitrosomonas europaea. Journal of Biological Chemistry, 2004, 279, 13297-13300.	3.4	35
30	Direct Electrochemistry of Tetraheme Cytochromec554fromNitrosomonas europaea:Â Redox Cooperativity and Gating. Journal of the American Chemical Society, 2007, 129, 1838-1839.	13.7	32
31	Solution-Based Structural Analysis of the Decaheme Cytochrome, MtrA, by Small-Angle X-ray Scattering and Analytical Ultracentrifugation. Journal of Physical Chemistry B, 2011, 115, 11208-11214.	2.6	32
32	The hydrogen dependent CO₂ reductase: the first completely CO tolerant FeFe-hydrogenase. Energy and Environmental Science, 2017, 10, 503-508.	30.8	30
33	An Unusual Role for a Mobile Flavin in StaC-like Indolocarbazole Biosynthetic Enzymes. Chemistry and Biology, 2012, 19, 855-865.	6.0	29
34	Molecular basis of cobalamin-dependent RNA modification. Nucleic Acids Research, 2016, 44, gkw806.	14.5	29
35	A Reverse TCA Cycle 2-Oxoacid:Ferredoxin Oxidoreductase that Makes C-C Bonds from CO2. Joule, 2019, 3, 595-611.	24.0	29
36	The Catalytic Bias of 2-Oxoacid:ferredoxin Oxidoreductase in CO2: evolution and reduction through a ferredoxin-mediated electrocatalytic assay. Electrochimica Acta, 2016, 199, 349-356.	5.2	28

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37	Redox Properties of Wild-Type and Heme-Binding Loop Mutants of Bacterial Cytochromes c Measured by Direct Electrochemistry. Inorganic Chemistry, 2005, 44, 8999-9006.	4.0	27
38	Methionine Ligand Lability of Type I Cytochromesc: Detection of Ligand Loss Using Protein Film Voltammetry. Journal of the American Chemical Society, 2008, 130, 6682-6683.	13.7	25
39	Oxidative Disassembly of the [2Fe-2S] Cluster of Human Grx2 and Redox Regulation in the Mitochondria. Biochemistry, 2009, 48, 3813-3815.	2.5	25
40	Spectroscopic and Electrochemical Characterization of the Mycofactocin Biosynthetic Protein, MftC, Provides Insight into Its Redox Flipping Mechanism. Biochemistry, 2019, 58, 940-950.	2.5	25
41	Light-driven carbonâˆ’carbon bond formation via CO₂reduction catalyzed by complexes of CdS nanorods and a 2-oxoacid oxidoreductase. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 135-140.	7.1	24
42	Hydrogen Bonding Networks Tune Proton-Coupled Redox Steps during the Enzymatic Six-Electron Conversion of Nitrite to Ammonia. Biochemistry, 2014, 53, 5638-5646.	2.5	23
43	The â€œBridgingâ€• Aspartate 178 in Phthalate Dioxygenase Facilitates Interactions between the Rieske Center and the Iron(II)âˆ’Mononuclear Centerâ€. Biochemistry, 2006, 45, 10208-10216.	2.5	22
44	Direct Electrochemical Characterization of Archaeal Thioredoxins. Angewandte Chemie - International Edition, 2007, 46, 4145-4147.	13.8	21
45	Thioredoxin Reductase from <i>Thermoplasma acidophilum</i>: A New Twist on Redox Regulation[,]. Biochemistry, 2008, 47, 9728-9737.	2.5	21
46	Electrochemical Evidence for Multiple Peroxidatic Heme States of the Diheme Cytochrome <i>c</i> Peroxidase of <i>Pseudomonas aeruginosa</i>. Biochemistry, 2009, 48, 87-95.	2.5	20
47	A widely distributed diheme enzyme from Burkholderia that displays an atypically stable bis-Fe(IV) state. Nature Communications, 2019, 10, 1101.	12.8	20
48	Ferredoxins as interchangeable redox components in support of MiaB, a radical Sâ€adenosylmethionine methylthiotransferase. Protein Science, 2019, 28, 267-282.	7.6	20
49	Direct Electrochemistry of <i>Shewanella oneidensis</i> Cytochrome <i>c</i> Nitrite Reductase: Evidence of Interactions across the Dimeric Interface. Biochemistry, 2012, 51, 10175-10185.	2.5	19
50	A Ferredoxin Disulfide Reductase Delivers Electrons to the <i>Methanosarcina barkeri</i> Class III Ribonucleotide Reductase. Biochemistry, 2015, 54, 7019-7028.	2.5	18
51	Methionine Ligand Lability in Bacterial Monoheme Cytochromes <i>c</i>: An Electrochemical Study. Journal of Physical Chemistry B, 2011, 115, 11718-11726.	2.6	17
52	Structural Properties and Catalytic Implications of the SPASM Domain Ironâ€“Sulfur Clusters in <i>Methylorubrum extorquens</i> PqqE. Journal of the American Chemical Society, 2020, 142, 12620-12634.	13.7	17
53	Transformations of the FeS Clusters of the Methylthiotransferases MiaB and RimO, Detected by Direct Electrochemistry. Biochemistry, 2016, 55, 5531-5536.	2.5	16
54	Mind the gap: diversity and reactivity relationships among multihaem cytochromes of the MtrA/DmsE family. Biochemical Society Transactions, 2012, 40, 1268-1273.	3.4	15

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55	Resonance Raman, Electron Paramagnetic Resonance, and Magnetic Circular Dichroism Spectroscopic Investigation of Diheme Cytochrome <i>c</i> Peroxidases from <i>Nitrosomonas europaea</i> and <i>Shewanella oneidensis</i>. Biochemistry, 2018, 57, 6416-6433.	2.5	15
56	Parsing redox potentials of five ferredoxins found within <i>Thermotoga maritima</i>. Protein Science, 2019, 28, 257-266.	7.6	14
57	OvoA_{Mtht}from<i>Methyloversatilis thermotolerans</i>ovothiol biosynthesis is a bifunction enzyme: thiol oxygenase and sulfoxide synthase activities. Chemical Science, 2022, 13, 3589-3598.	7.4	14
58	Deconvoluting the Reduction Potentials for the Three [4Fe-4S] Clusters in an AdoMet Radical SCIFF Maturase. Biochemistry, 2018, 57, 6050-6053.	2.5	13
59	The Biochemistry Of the Particulate Methane Monooxygenase. , 1996, , 150-158.		13
60	Rheostat Re-Wired: Alternative Hypotheses for the Control of Thioredoxin Reduction Potentials. PLoS ONE, 2015, 10, e0122466.	2.5	13
61	Protonation and inhibition of Nitrosomonas europaea cytochrome c peroxidase observed with protein film voltammetry. Journal of Inorganic Biochemistry, 2007, 101, 173-179.	3.5	12
62	Deconvolution of reduction potentials of formate dehydrogenase from Cupriavidus necator. Journal of Biological Inorganic Chemistry, 2019, 24, 889-898.	2.6	12
63	Direct Electrochemical Analyses of a Thermophilic Thioredoxin Reductase: Interplay between Conformational Change and Redox Chemistry. Biochemistry, 2008, 47, 9738-9746.	2.5	10
64	Methionine Ligand Lability of Homologous Monoheme Cytochromes <i>c</i>. Inorganic Chemistry, 2015, 54, 38-46.	4.0	10
65	Determining Redox Potentials of the Ironâ€"Sulfur Clusters of the AdoMet Radical Enzyme Superfamily. Methods in Enzymology, 2018, 606, 319-339.	1.0	10
66	Influence of heme c attachment on heme conformation and potential. Journal of Biological Inorganic Chemistry, 2018, 23, 1073-1083.	2.6	10
67	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
68	Maximizing (Electro)catalytic CO₂ Reduction with a Ferredoxin-Based Reduction Potential Gradient. ACS Catalysis, 2021, 11, 4009-4023.	11.2	10
69	Flavin-Induced Oligomerization in <i>Escherichia coli</i> Adaptive Response Protein AidB. Biochemistry, 2011, 50, 10159-10169.	2.5	9
70	<i>Geobacter sulfurreducens</i> Cytochrome <i>c</i> Peroxidases: Electrochemical Classification of Catalytic Mechanisms. Biochemistry, 2011, 50, 4513-4520.	2.5	9
71	Correlations between the Electronic Properties of <i>Shewanella oneidensis</i> Cytochrome <i>c</i> Nitrite Reductase (ccNiR) and Its Structure: Effects of Heme Oxidation State and Active Site Ligation. Biochemistry, 2015, 54, 3749-3758.	2.5	9
72	Impact of Quaternary Structure upon Bacterial Cytochrome <i>c</i> Peroxidases: Does Homodimerization Matter?. Biochemistry, 2012, 51, 10008-10016.	2.5	8

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73	Functionally Distinct Bacterial Cytochrome <i>c</i> Peroxidases Proceed through a Common (Electro)catalytic Intermediate. Biochemistry, 2016, 55, 125-132.	2.5	7
74	Mechanism of Reduction of an Aminyl Radical Intermediate in the Radical SAM GTP 3â€²,8-Cyclase MoaA. Journal of the American Chemical Society, 2021, 143, 13835-13844.	13.7	7
75	Electrochemical Characterization of Escherichia coli Adaptive Response Protein AidB. International Journal of Molecular Sciences, 2012, 13, 16899-16915.	4.1	6
76	Elucidating Electron Storage and Distribution within the Pentaheme Scaffold of Cytochrome <i>c</i> Nitrite Reductase (NrfA). Biochemistry, 2021, 60, 1853-1867.	2.5	6
77	A Stable Ferryl Porphyrin at the Active Site of Y463M BthA. Journal of the American Chemical Society, 2020, 142, 11978-11982.	13.7	1
78	Bioenergetics Theory and Components | Ironâ€“Sulfur Proteins. , 2021, , 53-65.		0
79	Direct Electrochemistry of Shewanella oneidensis Cytochrome c Nitrite Reductase. FASEB Journal, 2013, 27, lb59.	0.5	0
80	Electrochemical investigation of a radical s adenosylmethionine enzyme: BtrN from Bacillus circulans. FASEB Journal, 2013, 27, .	0.5	0
81	Protonâ€Dependence of the MitoNEET [2Feâ€2S] Cluster : An Electrochemical and Structural Investigation. FASEB Journal, 2013, 27, lb175.	0.5	0
82	Bacterial Cytochrome c Peroxidases: Insight into the Structureâ€Function Relationship. FASEB Journal, 2015, 29, 722.12.	0.5	0
83	Potential New Chemical Roles for Diheme Enzymes in Burkholderia. FASEB Journal, 2015, 29, 573.24.	0.5	0