Tom A Clarke

List of Publications by Year
in descending order

67 papers	4,779 citations	109321 35 h-index	98798 67 g-index
69 all docs	69 docs citations	69 times ranked	4217 citing authors

#	Article	IF	Citations
1	Characterization of an electron conduit between bacteria and the extracellular environment. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22169-22174.	7.1	410
2	The Metabolism of Clopidogrel Is Catalyzed by Human Cytochrome P450 3A and Is Inhibited by Atorvastatin. Drug Metabolism and Disposition, 2003, 31, 53-59.	3.3	354
3	Structure of a bacterial cell surface decaheme electron conduit. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9384-9389.	7.1	301
4	The â€˜porinâ€“cytochromeâ€™ model for microbeâ€toâ€mineral electron transfer. Molecular Microbiology, 2012, 85, 201-212.	2.5	222
5	Characterization of Shewanella oneidensis MtrC: a cell-surface decaheme cytochrome involved in respiratory electron transport to extracellular electron acceptors. Journal of Biological Inorganic Chemistry, 2007, 12, 1083-1094.	2.6	209
6	Molecular Underpinnings of Fe(III) Oxide Reduction by Shewanella Oneidensis MR-1. Frontiers in Microbiology, 2012, 3, 50.	3.5	186
7	Rapid electron exchange between surface-exposed bacterial cytochromes and Fe(III) minerals. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6346-6351.	7.1	179
8	Structures of Phytophthora RXLR Effector Proteins. Journal of Biological Chemistry, 2011, 286, 35834-35842.	3.4	178
9	A transâ€outer membrane porinâ€cytochrome protein complex for extracellular electron transfer by <scp><i>G</i></scp><i>eobacter sulfurreducens</i>â€…<scp>PCA</scp>. Environmental Microbiology Reports, 2014, 6, 776-785.	2.4	178
10	Characterization of Protein-Protein Interactions Involved in Iron Reduction by <i>Shewanella oneidensis</i> MR-1. Applied and Environmental Microbiology, 2007, 73, 5797-5808.	3.1	145
11	Mechanisms of Bacterial Extracellular Electron Exchange. Advances in Microbial Physiology, 2016, 68, 87-138.	2.4	140
12	Redox Linked Flavin Sites in Extracellular Decaheme Proteins Involved in Microbe-Mineral Electron Transfer.. Scientific Reports, 2015, 5, 11677.	3.3	138
13	The Crystal Structure of a Biological Insulated Transmembrane Molecular Wire. Cell, 2020, 181, 665-673.e10.	28.9	123
14	The Transcriptional Repressor Protein NsrR Senses Nitric Oxide Directly via a [2Fe-2S] Cluster. PLoS ONE, 2008, 3, e3623.	2.5	121
15	The impact of copper, nitrate and carbon status on the emission of nitrous oxide by two species of bacteria with biochemically distinct denitrification pathways. Environmental Microbiology, 2012, 14, 1788-1800.	3.8	110
16	Spectropotentiometric and Structural Analysis of the Periplasmic Nitrate Reductase from Escherichia coli. Journal of Biological Chemistry, 2007, 282, 6425-6437.	3.4	94
17	Electron transfer process in microbial electrochemical technologies: The role of cell-surface exposed conductive proteins. Bioresource Technology, 2018, 255, 308-317.	9.6	85
18	Signal peptideâ€“chaperone interactions on the twin-arginine protein transport pathway. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 8460-8465.	7.1	84

#	Article	IF	Citations
19	Extracellular reduction of solid electron acceptors by <i>Shewanella oneidensis</i>. Molecular Microbiology, 2018, 109, 571-583.	2.5	83
20	A Crystal Structure of the Bifunctional Antibiotic Simocyclinone D8, Bound to DNA Gyrase. Science, 2009, 326, 1415-1418.	12.6	81
21	The Xâ€•ray crystal structure of <i>Shewanella oneidensis</i> OmcA reveals new insight at the microbeâ€“mineral interface. FEBS Letters, 2014, 588, 1886-1890.	2.8	73
22	Light-Driven H₂ Evolution and Câ•C or Câ•O Bond Hydrogenation by <i>Shewanella oneidensis</i>: A Versatile Strategy for Photocatalysis by Nonphotosynthetic Microorganisms. ACS Catalysis, 2017, 7, 7558-7566.	11.2	72
23	The crystal structure of the pentahaem <i>c</i>-type cytochrome NrfB and characterization of its solution-state interaction with the pentahaem nitrite reductase NrfA. Biochemical Journal, 2007, 406, 19-30.	3.7	69
24	The Crystal Structure of the Extracellular 11-heme Cytochrome UndA Reveals a Conserved 10-heme Motif and Defined Binding Site for Soluble Iron Chelates. Structure, 2012, 20, 1275-1284.	3.3	56
25	A dedicated haem lyase is required for the maturation of a novel bacterial cytochrome c with unconventional covalent haem binding. Molecular Microbiology, 2007, 64, 1049-1060.	2.5	51
26	Structural modeling of an outer membrane electron conduit from a metal-reducing bacterium suggests electron transfer via periplasmic redox partners. Journal of Biological Chemistry, 2018, 293, 8103-8112.	3.4	51
27	Characterization of MtoD from Sideroxydans lithotrophicus: a cytochrome c electron shuttle used in lithoautotrophic growth. Frontiers in Microbiology, 2015, 6, 332.	3.5	48
28	Role of multiheme cytochromes involved in extracellular anaerobic respiration in bacteria. Protein Science, 2020, 29, 830-842.	7.6	48
29	ZraP is a periplasmic molecular chaperone and a repressor of the zinc-responsive two-component regulator ZraSR. Biochemical Journal, 2012, 442, 85-93.	3.7	46
30	Which Multi-Heme Protein Complex Transfers Electrons More Efficiently? Comparing MtrCAB from <i>Shewanella</i> with OmcS from <i>Geobacter</i>. Journal of Physical Chemistry Letters, 2020, 11, 9421-9425.	4.6	46
31	The metabolic impact of extracellular nitrite on aerobic metabolism of Paracoccus denitrificans. Water Research, 2017, 113, 207-214.	11.3	45
32	Identification of furfural resistant strains of Saccharomyces cerevisiae and Saccharomyces paradoxus from a collection of environmental and industrial isolates. Biotechnology for Biofuels, 2015, 8, 33.	6.2	42
33	Effects of soluble flavin on heterogeneous electron transfer between surface-exposed bacterial cytochromes and iron oxides. Geochimica Et Cosmochimica Acta, 2015, 163, 299-310.	3.9	41
34	Molecular structure and free energy landscape for electron transport in the decahaem cytochrome MtrF. Biochemical Society Transactions, 2012, 40, 1198-1203.	3.4	37
35	The role of the length and sequence of the linker domain of cytochrome b5 in stimulating cytochrome P450 2B4 catalysis.. Journal of Biological Chemistry, 2004, 279, 36809-36818.	3.4	36
36	Role of a Conserved Glutamine Residue in Tuning the Catalytic Activity of <i>Escherichia coli</i> Cytochrome <i>c</i> Nitrite Reductase. Biochemistry, 2008, 47, 3789-3799.	2.5	36

#	Article	IF	Citations
37	Escherichia coli Cytochrome c Nitrite Reductase NrfA. Methods in Enzymology, 2008, 437, 63-77.	1.0	36
38	Quaternary structure changes in a second Per-Arnt-Sim domain mediate intramolecular redox signal relay in the NifL regulatory protein. Molecular Microbiology, 2010, 75, 61-75.	2.5	36
39	Electron shuttle-mediated microbial Fe(III) reduction under alkaline conditions. Journal of Soils and Sediments, 2018, 18, 159-168.	3.0	35
40	Purification and Spectropotentiometric Characterization of Escherichia coli NrfB, a Decaheme Homodimer That Transfers Electrons to the Decaheme Periplasmic Nitrite Reductase Complex. Journal of Biological Chemistry, 2004, 279, 41333-41339.	3.4	33
41	Kinetic and thermodynamic resolution of the interactions between sulfite and the pentahaem cytochrome NrfA from <i>Escherichia coli</i>. Biochemical Journal, 2010, 431, 73-80.	3.7	33
42	Nanosecond heme-to-heme electron transfer rates in a multiheme cytochrome nanowire reported by a spectrally unique His/Met-ligated heme. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	29
43	Resolution of Key Roles for the Distal Pocket Histidine in Cytochrome <i>c</i> Nitrite Reductases. Journal of the American Chemical Society, 2015, 137, 3059-3068.	13.7	28
44	Ultrafast Light-Driven Electron Transfer in a Ru(II)tris(bipyridine)-Labeled Multiheme Cytochrome. Journal of the American Chemical Society, 2019, 141, 15190-15200.	13.7	28
45	An electrogenic redox loop in sulfate reduction reveals a likely widespread mechanism of energy conservation. Nature Communications, 2018, 9, 5448.	12.8	27
46	Analysis of structural MtrC models based on homology with the crystal structure of MtrF. Biochemical Society Transactions, 2012, 40, 1181-1185.	3.4	25
47	Exploring the biochemistry at the extracellular redox frontier of bacterial mineral Fe(III) respiration. Biochemical Society Transactions, 2012, 40, 493-500.	3.4	24
48	Comparative structure-potentio-spectroscopy of the Shewanella outer membrane multiheme cytochromes. Current Opinion in Electrochemistry, 2017, 4, 199-205.	4.8	22
49	Development of a proteoliposome model to probe transmembrane electron-transfer reactions. Biochemical Society Transactions, 2012, 40, 1257-1260.	3.4	20
50	Controlling electron transfer at the microbeâ€“mineral interface. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7537-7538.	7.1	20
51	The role of multihaem cytochromes in the respiration of nitrite in <i>Escherichia coli</i> and Fe(III) in <i>Shewanella oneidensis</i>. Biochemical Society Transactions, 2008, 36, 1005-1010.	3.4	18
52	Substitutions in the redoxâ€sensing PAS domain of the NifL regulatory protein define an interâ€subunit pathway for redox signal transmission. Molecular Microbiology, 2011, 82, 222-235.	2.5	17
53	Klebsiella pneumoniaeNitrogenase:Â Formation and Stability of Putative Beryllium Fluorideâˆ'ADP Transition State Complexesâ€. Biochemistry, 1999, 38, 9906-9913.	2.5	15
54	Formation of a Tight 1:1 Complex of Clostridium pasteurianum Fe Proteinâˆ'Azotobacter vinelandii MoFe Protein:â€‰ Evidence for Long-Range Interactions between the Fe Protein Binding Sites during Catalytic Hydrogen Evolution. Biochemistry, 2000, 39, 11434-11440.	2.5	15

#	Article	IF	Citations
55	Photoreduction of <i>Shewanella oneidensis</i> Extracellular Cytochromes by Organic Chromophores and Dyeâ€Sensitized TiO₂. ChemBioChem, 2016, 17, 2324-2333.	2.6	15
56	Plugging into bacterial nanowires: a comparison of model electrogenic organisms. Current Opinion in Microbiology, 2022, 66, 56-62.	5.1	11
57	Electron transfer and half-reactivity in nitrogenase. Biochemical Society Transactions, 2011, 39, 201-206.	3.4	10
58	Whole-cell circular dichroism difference spectroscopy reveals an <i>in vivo</i>-specific deca-heme conformation in bacterial surface cytochromes. Chemical Communications, 2018, 54, 13933-13936.	4.1	10
59	Photosensitised Multiheme Cytochromes as Lightâ€Driven Molecular Wires and Resistors. ChemBioChem, 2018, 19, 2206-2215.	2.6	10
60	Molecular interactions between multihaem cytochromes: probing the proteinâ€“protein interactions between pentahaem cytochromes of a nitrite reductase complex. Biochemical Society Transactions, 2011, 39, 263-268.	3.4	8
61	Characterization of the active site and calcium binding in cytochrome <i>c</i> nitrite reductases. Biochemical Society Transactions, 2011, 39, 1871-1875.	3.4	8
62	Bespoke Biomolecular Wires for Transmembrane Electron Transfer: Spontaneous Assembly of a Functionalized Multiheme Electron Conduit. Frontiers in Microbiology, 2021, 12, 714508.	3.5	7
63	Freely diffusing versus adsorbed protein: Which better mimics the cellular state of a redox protein?. Electrochimica Acta, 2013, 110, 73-78.	5.2	6
64	Membrane-spanning electron transfer proteins from electrogenic bacteria: Production and investigation. Methods in Enzymology, 2018, 613, 257-275.	1.0	6
65	His/Met heme ligation in the PioA outer membrane cytochrome enabling light-driven extracellular electron transfer by Rhodopseudomonas palustris TIE-1. Nanotechnology, 2020, 31, 354002.	2.6	5
66	Making Connections: An Amphiphilic Ferrocene Stimulates Bacterial Electricity Production. CheM, 2017, 2, 164-167.	11.7	2
67	Uncovering natureâ€™s electronics. Nature Chemical Biology, 2020, 16, 1041-1042.	8.0	2