Ricardo O Louro

List of Publications by Year
in descending order

103 papers	2,897 citations	117453 34 h-index	197535 49 g-index
112 all docs	112 docs citations	112 times ranked	2592 citing authors

#	Article	IF	Citations
1	A dynamic periplasmic electron transfer network enables respiratory flexibility beyond a thermodynamic regulatory regime. ISME Journal, 2015, 9, 1802-1811.	4.4	134
2	Mind the gap: cytochrome interactions reveal electron pathways across the periplasm of Shewanella oneidensis MR-1. Biochemical Journal, 2013, 449, 101-108.	1.7	129
3	IR780 based nanomaterials for cancer imaging and photothermal, photodynamic and combinatorial therapies. International Journal of Pharmaceutics, 2018, 542, 164-175.	2.6	105
4	Hyaluronic acid functionalized green reduced graphene oxide for targeted cancer photothermal therapy. Carbohydrate Polymers, 2018, 200, 93-99.	5.1	95
5	Electron transfer process in microbial electrochemical technologies: The role of cell-surface exposed conductive proteins. Bioresource Technology, 2018, 255, 308-317.	4.8	85
6	Extracellular reduction of solid electron acceptors by Shewanella oneidensis. Molecular Microbiology, 2018, 109, 571-583.	1.2	83
7	Functionalization of graphene family nanomaterials for application in cancer therapy. Colloids and Surfaces B: Biointerfaces, 2018, 171, 260-275.	2.5	69
8	Energy metabolism in Desulfovibrio vulgaris Hildenborough: insights from transcriptome analysis. Antonie Van Leeuwenhoek, 2008, 93, 347-362.	0.7	66
9	Functional and Mechanistic Studies of Cytochromec3fromDesulfovibrio gigas:Â Thermodynamics of a â€œProton Thrusterâ€Ââ€. Biochemistry, 1998, 37, 15808-15815.	1.2	65
10	Exploring the molecular mechanisms of electron shuttling across the microbe/metal space. Frontiers in Microbiology, 2014, 5, 318.	1.5	65
11	Electronic Structure of Low-Spin Ferric Porphyrins:Â13C NMR Studies of the Influence of Axial Ligand Orientation. Journal of the American Chemical Society, 1998, 120, 13240-13247.	6.6	62
12	In vitro characterization of 3D printed scaffolds aimed at bone tissue regeneration. Colloids and Surfaces B: Biointerfaces, 2018, 165, 207-218.	2.5	59
13	Redox-Bohr effect in the tetrahaem cytochrome c3 from Desulfovibrio vulgaris: a model for energy transduction mechanisms. Journal of Biological Inorganic Chemistry, 1996, 1, 34-38.	1.1	58
14	Cooperativity between Electrons and Protons in a Monomeric Cytochrome c3: The Importance of Mechano-Chemical Coupling for Energy Transduction. ChemBioChem, 2001, 2, 831.	1.3	57
15	Determination of solution structures of paramagnetic proteins by NMR. European Biophysics Journal, 1998, 27, 367-375.	1.2	56
16	Redox-Bohr effect in electron/proton energy transduction: cytochrome c 3 coupled to hydrogenase works as a 'proton thruster' in Desulfovibrio vulgaris. Journal of Biological Inorganic Chemistry, 1997, 2, 488-491.	1.1	55
17	Unveiling the Details of Electron Transfer in Multicenter Redox Proteins. Accounts of Chemical Research, 2014, 47, 56-65.	7.6	55
18	Green reduced graphene oxide functionalized 3D printed scaffolds for bone tissue regeneration. Carbon, 2019, 146, 513-523.	5.4	54

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19	Thermodynamic Characterization of Triheme Cytochrome PpcA fromGeobacter sulfurreducens:Â Evidence for a Role Played in e-/H+Energy Transductionâ€,â€¡. Biochemistry, 2006, 45, 13910-13917.	1.2	53
20	POxylated graphene oxide nanomaterials for combination chemo-phototherapy of breast cancer cells. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 131, 162-169.	2.0	52
21	Periodic polarization of electroactive biofilms increases current density and charge carriers concentration while modifying biofilm structure. Biosensors and Bioelectronics, 2018, 121, 183-191.	5.3	49
22	The Tmc Complex fromDesulfovibrio vulgarisHildenborough Is Involved in Transmembrane Electron Transfer from Periplasmic Hydrogen Oxidationâ€. Biochemistry, 2006, 45, 10359-10367.	1.2	48
23	The tetraheme cytochrome from Shewanella oneidensis MR-1 shows thermodynamic bias for functional specificity of the hemes. Journal of Biological Inorganic Chemistry, 2009, 14, 375-385.	1.1	48
24	Electroactive Biochar for Large-Scale Environmental Applications of Microbial Electrochemistry. ACS Sustainable Chemistry and Engineering, 2019, 7, 18198-18212.	3.2	46
25	Characterization of the periplasmic redox network that sustains the versatile anaerobic metabolism of Shewanella oneidensis MR-1. Frontiers in Microbiology, 2015, 6, 665.	1.5	42
26	Tuning of functional heme reduction potentials in Shewanella fumarate reductases. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 113-120.	0.5	40
27	Nonredundant Roles for Cytochrome c ₂ and Two High-Potential Iron-Sulfur Proteins in the Photoferrotroph Rhodopseudomonas palustris TIE-1. Journal of Bacteriology, 2014, 196, 850-858.	1.0	40
28	Conformational Component in the Coupled Transfer of Multiple Electrons and Protons in a Monomeric Tetraheme Cytochrome. Journal of Biological Chemistry, 2001, 276, 44044-44051.	1.6	39
29	Thermodynamic and kinetic characterization of trihaem cytochrome c 3 from Desulfuromonas acetoxidans. FEBS Journal, 2002, 269, 5722-5730.	0.2	39
30	Molecular details of multielectron transfer: the case of multiheme cytochromes from metal respiring organisms. Dalton Transactions, 2010, 39, 4259-4266.	1.6	38
31	Comparative redox and pK a calculations on cytochrome c 3 from several Desulfovibrio species using continuum electrostatic methods. Journal of Biological Inorganic Chemistry, 1999, 4, 73-86.	1.1	37
32	Transcriptional response of Desulfovibrio vulgaris Hildenborough to oxidative stress mimicking environmental conditions. Archives of Microbiology, 2008, 189, 451-461.	1.0	37
33	Thermodynamic and kinetic characterisation of individual haems in multicentre cytochromes c3. Biochimica Et Biophysica Acta - Bioenergetics, 2007, 1767, 1169-1179.	0.5	36
34	The role of intramolecular interactions in the functional control of multiheme cytochromes c. FEBS Letters, 2012, 586, 504-509.	1.3	36
35	Iron-coproporphyrin III is a natural cofactor in bacterioferritin from the anaerobic bacteriumDesulfovibrio desulfuricans. FEBS Letters, 2000, 480, 213-216.	1.3	35
36	D-Î±-tocopheryl polyethylene glycol 1000 succinate functionalized nanographene oxide for cancer therapy. Nanomedicine, 2017, 12, 443-456.	1.7	35

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37	Distance dependence of interactions between charged centres in proteins with common structural features. FEBS Letters, 2004, 576, 77-80.	1.3	34
38	Proton thrusters: overview of the structural and functional features of soluble tetrahaem cytochromes c 3. Journal of Biological Inorganic Chemistry, 2006, 12, 1-10.	1.1	33
39	Structure-function relationship in type II cytochrome c 3 from Desulfovibrio africanus: a novel function in a familiar heme core. Journal of Biological Inorganic Chemistry, 2002, 7, 815-822.	1.1	29
40	Exploration of the â€˜cytochromomeâ€™ of Desulfuromonas acetoxidans, a marine bacterium capable of powering microbial fuel cells. Metallomics, 2011, 3, 349.	1.0	28
41	Structural and functional characterization of cytochromec3fromD. desulfuricansATCC 27774 by1H-NMR. FEBS Letters, 1996, 390, 59-62.	1.3	27
42	Functional Characterization of the FoxE Iron Oxidoreductase from the Photoferrotroph Rhodobacter ferrooxidans SW2. Journal of Biological Chemistry, 2012, 287, 25541-25548.	1.6	27
43	Biofunctionalized nanoparticles with pH-responsive and cell penetrating blocks for gene delivery. Nanotechnology, 2013, 24, 275101.	1.3	26
44	Proton-assisted Two-electron Transfer in Natural Variants of Tetraheme Cytochromes from Desulfomicrobium Sp.. Journal of Biological Chemistry, 2004, 279, 52227-52237.	1.6	24
45	Energy conservation by Rhodothermus marinus respiratory complex I. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 509-515.	0.5	24
46	Molecular Basis for Directional Electron Transfer. Journal of Biological Chemistry, 2010, 285, 10370-10375.	1.6	24
47	Thermodynamic characterization of a tetrahaem cytochrome isolated from a facultative aerobic bacterium, Shewanella frigidimarina: a putative redox model for flavocytochrome c3. Biochemical Journal, 2003, 370, 489-495.	1.7	23
48	Orientation of the axial ligands and magnetic properties of the hemes in the triheme ferricytochrome PpcA from G. sulfurreducens determined by paramagnetic NMR. FEBS Letters, 2010, 584, 3442-3445.	1.3	20
49	Mapping the Iron Binding Site(s) on the Small Tetraheme Cytochrome of Shewanella oneidensis MR-1. Biochemistry, 2011, 50, 6217-6224.	1.2	19
50	Heterologous expression and purification of a multiheme cytochrome from a Gram-positive bacterium capable of performing extracellular respiration. Protein Expression and Purification, 2015, 111, 48-52.	0.6	19
51	PREâ€driven protein NMR structures: an alternative approach in highly paramagnetic systems. FEBS Journal, 2021, 288, 3010-3023.	2.2	18
52	Orientation of the axial ligands and magnetic properties of the hemes in the cytochrome c7 family from Geobacter sulfurreducens determined by paramagnetic NMR. Dalton Transactions, 2011, 40, 12713.	1.6	17
53	Pivotal role of the strictly conserved aromatic residue F15 in the cytochrome c 7 family. Journal of Biological Inorganic Chemistry, 2012, 17, 11-24.	1.1	15
54	Artificial heme-proteins: determination of axial ligand orientations through paramagnetic NMR shifts. Chemical Communications, 2014, 50, 3852-3855.	2.2	14

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55	Measuring transverse relaxation in highly paramagnetic systems. Journal of Biomolecular NMR, 2020, 74, 431-442.	1.6	14
56	A ferredoxin from the thermohalophilic bacterium Rhodothermus marinus. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2002, 1601, 1-8.	1.1	13
57	Redox tuning of the catalytic activity of soluble fumarate reductases from Shewanella. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 717-725.	0.5	13
58	Electrochemical Detection of pH-Responsive Grafted Catechol and Immobilized Cytochromeconto Lipid Deposit-Modified Glassy Carbon Surface. ACS Omega, 2018, 3, 9035-9042.	1.6	13
59	Communicationâ€"Electrochemical Single Nano-Impacts of Electroactive Shewanella Oneidensis Bacteria onto Carbon Ultramicroelectrode. Journal of the Electrochemical Society, 2020, 167, 105501.	1.3	13
60	Redox-Bohr effect in the nine haem cytochrome from Desulfovibrio desulfuricans 27774. Inorganica Chimica Acta, 2002, 339, 248-252.	1.2	12
61	Nature of the Surface-Exposed Cytochromeâ€"Electrode Interactions in Electroactive Biofilms of Desulfuromonas acetoxidans. Journal of Physical Chemistry B, 2015, 119, 7968-7974.	1.2	12
62	Modulation of the reactivity of multiheme cytochromes by site-directed mutagenesis: moving towards the optimization of microbial electrochemical technologies. Journal of Biological Inorganic Chemistry, 2017, 22, 87-97.	1.1	12
63	A brief survey of the â€œcytochromomeâ€• Advances in Microbial Physiology, 2019, 75, 69-135.	1.0	12
64	Structure and reactivity of a siderophore-interacting protein from the marine bacterium Shewanella reveals unanticipated functional versatility. Journal of Biological Chemistry, 2019, 294, 157-167.	1.6	12
65	Crossing the Wall: Characterization of the Multiheme Cytochromes Involved in the Extracellular Electron Transfer Pathway of Thermincola ferriacetica. Microorganisms, 2021, 9, 293.	1.6	12
66	Sporomusa ovata as Catalyst for Bioelectrochemical Carbon Dioxide Reduction: A Review Across Disciplines From Microbiology to Process Engineering. Frontiers in Microbiology, 0, 13, .	1.5	12
67	A New Paradigm of Multiheme Cytochrome Evolution by Grafting and Pruning Protein Modules. Molecular Biology and Evolution, 2022, 39, .	3.5	12
68	Characterization of cytochrome c 6 from the cyanobacterium Anabaena PCC 7119. Journal of Biological Inorganic Chemistry, 1997, 2, 225-234.	1.1	11
69	Replacement of the methionine axial ligand in cytochrome c 550 by a lysine: effects on the haem electronic structure. FEBS Letters, 2002, 510, 185-188.	1.3	11
70	The quest to achieve the detailed structural and functional characterization of CymA. Biochemical Society Transactions, 2012, 40, 1291-1294.	1.6	11
71	Optimizing Electroactive Organisms: The Effect of Orthologous Proteins. Frontiers in Energy Research, 2019, 7, .	1.2	11
72	Functional properties of type I and type II cytochromes c3 from Desulfovibrio africanus. Biochimica Et Biophysica Acta - Bioenergetics, 2007, 1767, 178-188.	0.5	10

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73	Study of ion translocation by respiratory complex I. A new insight using 23Na NMR spectroscopy. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 1810-1816.	0.5	10
74	Characterization of OmcA Mutants from Shewanella oneidensis MRâ€1 to Investigate the Molecular Mechanisms Underpinning Electron Transfer Across the Microbeâ€Electrode Interface. Fuel Cells, 2017, 17, 601-611.	1.5	10
75	Molecular structure of FoxE, the putative iron oxidase of Rhodobacter ferrooxidans SW2. Biochimica Et Biophysica Acta - Bioenergetics, 2017, 1858, 847-853.	0.5	10
76	Sequence-specific assignments in NMR spectra of paramagnetic systems: A non-systematic approach. Inorganica Chimica Acta, 2021, 514, 119984.	1.2	10
77	NMR of paramagnetic metalloproteins in solution: Ubi venire, quo vadis?. Journal of Inorganic Biochemistry, 2022, 234, 111871.	1.5	10
78	Efficient and selective isotopic labeling of hemes to facilitate the study of multiheme proteins. BioTechniques, 2012, 52, 1-7.	0.8	9
79	Structure and redox properties of the diheme electron carrier cytochrome c4 from Pseudomonas aeruginosa. Journal of Inorganic Biochemistry, 2020, 203, 110889.	1.5	9
80	1H, 13C and 15N assignment of the paramagnetic high potential ironâ€“sulfur protein (HiPIP) PioC from Rhodopseudomonas palustris TIE-1. Biomolecular NMR Assignments, 2020, 14, 211-215.	0.4	9
81	Structural and magnetic characterisation of the haem core of ferricytochromes c 6. Journal of Biological Inorganic Chemistry, 1998, 3, 68-73.	1.1	8
82	Determination of the orientation of the axial ligands and of the magnetic properties of the haems in the tetrahaem ferricytochrome from Shewanella frigidimarina. FEBS Letters, 2002, 531, 520-524.	1.3	7
83	Binding of ligands originates small perturbations on the microscopic thermodynamic properties of a multicentre redox protein. FEBS Journal, 2005, 272, 2251-2260.	2.2	7
84	Electrochemical properties of pH-dependent flavocytochrome c3 from Shewanella putrefaciens adsorbed onto unmodified and catechol-modified edge plane pyrolytic graphite electrode. Journal of Electroanalytical Chemistry, 2019, 847, 113232.	1.9	7
85	Histidine orientation in artificial peroxidase regioisomers as determined by paramagnetic NMR shifts. Chemical Communications, 2021, 57, 990-993.	2.2	7
86	Redox behaviour of the haem domain of flavocytochromec3fromShewanella frigidimarinaprobed by NMR. FEBS Letters, 2004, 578, 185-190.	1.3	6
87	NMR and molecular modelling studies on elastase inhibitor-peptides for wound management. Reactive and Functional Polymers, 2013, 73, 1357-1365.	2.0	6
88	The orientation of the iron axial ligands in the low-potential cytochrome c549 from Synechocystis sp. PCC 6803 studied by NMR. Inorganica Chimica Acta, 1998, 273, 196-200.	1.2	4
89	Introduction to Biomolecular NMR and Metals. , 2013, , 77-107.		4
90	Analysis of the residual alignment of a paramagnetic multiheme cytochrome by NMR. Chemical Communications, 2014, 50, 4561.	2.2	4

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91	A putative siderophore-interacting protein from the marine bacteriumShewanella frigidimarinaNCIMB 400: cloning, expression, purification, crystallization and X-ray diffraction analysis. Acta Crystallographica Section F, Structural Biology Communications, 2016, 72, 667-671.	0.4	3
92	Biomolecular NMR Assignment: Illustration Using the Heme Signals in Horse Cytochrome c. Journal of Chemical Education, 2017, 94, 1280-1284.	1.1	3
93	Exploring the Molecular Mechanisms of Extracellular Electron Transfer for Harnessing Reducing Power in METs. , 2019, , 261-293.		3
94	Crystallization and preliminary crystallographic studies of FoxE fromRhodobacter ferrooxidansSW2, an Fe^{II}oxidoreductase involved in photoferrotrophy. Acta Crystallographica Section F: Structural Biology Communications, 2012, 68, 1106-1108.	0.7	2
95	Bacterial Power: An Alternative Energy Source. , 2021, , 215-246.		2
96	Molecular mechanisms of heme based sensors from sediment organisms capable of extracellular electron transfer. Journal of Inorganic Biochemistry, 2014, 133, 104-109.	1.5	1
97	Investigation of the Molecular Mechanisms of the Eukaryotic Cytochrome-c Maturation System. Biomolecules, 2022, 12, 549.	1.8	1
98	Corrigendum to â€œThe role of intramolecular interactions in the functional control of multiheme cytochromesâ€•[FEBS Lett. 586 (2012) 504-509]. FEBS Letters, 2012, 586, 3536-3536.	1.3	0
99	Electron/proton coupling in biological energy transduction. FEBS Letters, 2012, 586, 473-473.	1.3	0
100	Other Spectroscopic Methods for Probing Metal Centres in Biological Systems. , 2013, , 161-177.		0
101	Structure of FoxE, the Rhodobacter ferrooxidans SW2 putative iron oxidase. Acta Crystallographica Section A: Foundations and Advances, 2017, 73, C1175-C1175.	0.0	0
102	Multi-Electron Transfer in Biological Systems. , 2015, , 1-34.		0
103	Electrochemical Properties of pH-Dependent Flavocytochrome C 3 from Shewanella Putrefaciens Adsorbed Onto Catechol-Modified Carbon Electrode. ECS Meeting Abstracts, 2020, MA2020-01, 2522-2522.	0.0	0