Fraser A Armstrong

List of Publications by Year
in descending order

207 papers	19,260 citations	7096 78 h-index	12597 132 g-index
212 all docs	212 docs citations	212 times ranked	10204 citing authors

#	Article	IF	Citations
1	Ironâ€“sulfur clusters as inhibitors and catalysts of viral replication. Nature Chemistry, 2022, 14, 253-266.	13.6	23
2	A Nanoconfined Four-Enzyme Cascade Simultaneously Driven by Electrical and Chemical Energy, with Built-in Rapid, Confocal Recycling of NADP(H) and ATP. ACS Catalysis, 2022, 12, 8811-8821.	11.2	9
3	The crystalline state as a dynamic system: IR microspectroscopy under electrochemical control for a [NiFe] hydrogenase. Chemical Science, 2021, 12, 12959-12970.	7.4	8
4	Selective cysteine-to-selenocysteine changes in a [NiFe]-hydrogenase confirm a special position for catalysis and oxygen tolerance. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	14
5	Exploiting Bidirectional Electrocatalysis by a Nanoconfined Enzyme Cascade to Drive and Control Enantioselective Reactions. ACS Catalysis, 2021, 11, 6526-6533.	11.2	17
6	Exploiting Electrode Nanoconfinement to Investigate the Catalytic Properties of Isocitrate Dehydrogenase (IDH1) and a Cancer-Associated Variant. Journal of Physical Chemistry Letters, 2021, 12, 6095-6101.	4.6	10
7	Some fundamental insights into biological redox catalysis from the electrochemical characteristics of enzymes attached directly to electrodes. Electrochimica Acta, 2021, 390, 138836.	5.2	7
8	The power of electrified nanoconfinement for energising, controlling and observing long enzyme cascades. Nature Communications, 2021, 12, 340.	12.8	34
9	Nanotechnology for catalysis and solar energy conversion. Nanotechnology, 2021, 32, 042003.	2.6	44
10	The roles of long-range proton-coupled electron transfer in the directionality and efficiency of [FeFe]-hydrogenases. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 20520-20529.	7.1	48
11	Progress in Scaling up and Streamlining a Nanoconfined, Enzymeâ€Catalyzed Electrochemical Nicotinamide Recycling System for Biocatalytic Synthesis. ChemElectroChem, 2020, 7, 4672-4678.	3.4	16
12	Electron flow between the worlds of Marcus and Warburg. Journal of Chemical Physics, 2020, 153, 225101.	3.0	12
13	Aerobic Photocatalytic H₂ Production by a [NiFe] Hydrogenase Engineered to Place a Silver Nanocluster in the Electron Relay. Journal of the American Chemical Society, 2020, 142, 12699-12707.	13.7	21
14	Viperin, through its radicalâ€SAM activity, depletes cellular nucleotide pools and interferes with mitochondrial metabolism to inhibit viral replication. FEBS Letters, 2020, 594, 1624-1630.	2.8	28
15	Bacterial rhomboid proteases mediate quality control of orphan membrane proteins. EMBO Journal, 2020, 39, e102922.	7.8	21
16	The final steps of [FeFe]-hydrogenase maturation. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15802-15810.	7.1	19
17	Efficient Electrocatalytic CO₂ Fixation by Nanoconfined Enzymes via a C3-to-C4 Reaction That Is Favored over H₂ Production. ACS Catalysis, 2019, 9, 11255-11262.	11.2	32
18	Electrified Nanoconfined Biocatalysis with Rapid Cofactor Recycling. ChemCatChem, 2019, 11, 5662-5670.	3.7	21

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19	Enzyme-catalysed enantioselective oxidation of alcohols by air exploiting fast electrochemical nicotinamide cycling in electrode nanopores. Green Chemistry, 2019, 21, 4958-4963.	9.0	17
20	The value of enzymes in solar fuels research â€“ efficient electrocatalysts through evolution. Chemical Society Reviews, 2019, 48, 2039-2052.	38.1	62
21	Electrocatalytic Volleyball: Rapid Nanoconfined Nicotinamide Cycling for Organic Synthesis in Electrode Pores. Angewandte Chemie, 2019, 131, 5002-5006.	2.0	5
22	Electrocatalytic Volleyball: Rapid Nanoconfined Nicotinamide Cycling for Organic Synthesis in Electrode Pores. Angewandte Chemie - International Edition, 2019, 58, 4948-4952.	13.8	60
23	Fast and Selective Photoreduction of CO₂ to CO Catalyzed by a Complex of Carbon Monoxide Dehydrogenase, TiO₂, and Ag Nanoclusters. ACS Catalysis, 2018, 8, 2789-2795.	11.2	82
24	A hydrogen fuel cell for rapid, enzyme-catalysed organic synthesis with continuous monitoring. Chemical Communications, 2018, 54, 972-975.	4.1	21
25	Protein Film Electrochemistry of Ironâ€“Sulfur Enzymes. Methods in Enzymology, 2018, 599, 387-407.	1.0	20
26	The structure of hydrogenase-2 from <i>Escherichia coli</i>: implications for H2-driven proton pumping. Biochemical Journal, 2018, 475, 1353-1370.	3.7	46
27	Direct visible light activation of a surface cysteine-engineered [NiFe]-hydrogenase by silver nanoclusters. Energy and Environmental Science, 2018, 11, 3342-3348.	30.8	26
28	Mechanistic Exploitation of a Self-Repairing, Blocked Proton Transfer Pathway in an O₂-Tolerant [NiFe]-Hydrogenase. Journal of the American Chemical Society, 2018, 140, 10208-10220.	13.7	33
29	X-ray structural, functional and computational studies of the O2-sensitive E. coli hydrogenase-1 C19G variant reveal an unusual [4Feâ€“4S] cluster. Chemical Communications, 2018, 54, 7175-7178.	4.1	5
30	Transfer of photosynthetic NADP⁺/NADPH recycling activity to a porous metal oxide for highly specific, electrochemically-driven organic synthesis. Chemical Science, 2017, 8, 4579-4586.	7.4	74
31	Generating single metalloprotein crystals in well-defined redox states: electrochemical control combined with infrared imaging of a NiFe hydrogenase crystal. Chemical Communications, 2017, 53, 5858-5861.	4.1	18
32	Frequency and potential dependence of reversible electrocatalytic hydrogen interconversion by [FeFe]-hydrogenases. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 3843-3848.	7.1	47
33	Importance of the Active Site â€œCanopyâ€• Residues in an O₂-Tolerant [NiFe]-Hydrogenase. Biochemistry, 2017, 56, 132-142.	2.5	31
34	The radicalâ€SAM enzyme Viperin catalyzes reductive addition of a 5â€²â€deoxyadenosyl radical to UDPâ€glucose <i>in vitro</i>. FEBS Letters, 2017, 591, 2394-2405.	2.8	27
35	Guiding Principles of Hydrogenase Catalysis Instigated and Clarified by Protein Film Electrochemistry. Accounts of Chemical Research, 2016, 49, 884-892.	15.6	75
36	Catalysis of solar hydrogen production by iron atoms on the surface of Fe-doped silicon carbide. Catalysis Science and Technology, 2016, 6, 7038-7041.	4.1	7

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37	Hydrogen activation by [NiFe]-hydrogenases. Biochemical Society Transactions, 2016, 44, 863-868.	3.4	18
38	Electrochemical Investigations of the Mechanism of Assembly of the Active-Site H-Cluster of [FeFe]-Hydrogenases. Journal of the American Chemical Society, 2016, 138, 15227-15233.	13.7	38
39	Selective, light-driven enzymatic dehalogenations of organic compounds. RSC Advances, 2016, 6, 84882-84886.	3.6	10
40	How the oxygen tolerance of a [NiFe]-hydrogenase depends on quaternary structure. Journal of Biological Inorganic Chemistry, 2016, 21, 121-134.	2.6	26
41	Electrocatalysis by H₂â€“O₂ membrane-free fuel cell enzymes in aqueous microenvironments confined by an ionic liquid. RSC Advances, 2016, 6, 44129-44134.	3.6	5
42	Mechanism of hydrogen activation by [NiFe] hydrogenases. Nature Chemical Biology, 2016, 12, 46-50.	8.0	102
43	Integration of an [FeFe]-hydrogenase into the anaerobic metabolism of Escherichia coli. Biotechnology Reports (Amsterdam, Netherlands), 2015, 8, 94-104.	4.4	8
44	Solar-driven proton and carbon dioxide reduction to fuels â€” lessons from metalloenzymes. Current Opinion in Chemical Biology, 2015, 25, 141-151.	6.1	54
45	Investigations by Protein Film Electrochemistry of Alternative Reactions of Nickel-Containing Carbon Monoxide Dehydrogenase. Journal of Physical Chemistry B, 2015, 119, 13690-13697.	2.6	30
46	Pushing the limits for enzyme-based membrane-less hydrogen fuel cells â€“ achieving useful power and stability. RSC Advances, 2015, 5, 3649-3656.	3.6	44
47	Discovery of Dark pH-Dependent H⁺ Migration in a [NiFe]-Hydrogenase and Its Mechanistic Relevance: Mobilizing the Hydrido Ligand of the Ni-C Intermediate. Journal of the American Chemical Society, 2015, 137, 8484-8489.	13.7	65
48	How Formaldehyde Inhibits Hydrogen Evolution by [FeFe]-Hydrogenases: Determination by ¹³C ENDOR of Direct Feâ€“C Coordination and Order of Electron and Proton Transfers. Journal of the American Chemical Society, 2015, 137, 5381-5389.	13.7	14
49	Spectroscopic and Redox Studies of Valence-Delocalized [Fe2S2]+ Centers in Thioredoxin-like Ferredoxins. Journal of the American Chemical Society, 2015, 137, 4567-4580.	13.7	20
50	Structural differences of oxidized ironâ€“sulfur and nickelâ€“iron cofactors in O 2 -tolerant and O 2 -sensitive hydrogenases studied by X-ray absorption spectroscopy. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 162-170.	1.0	14
51	Bacterial formate hydrogenlyase complex. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E3948-56.	7.1	209
52	Investigations of the Efficient Electrocatalytic Interconversions of Carbon Dioxide and Carbon Monoxide by Nickel-Containing Carbon Monoxide Dehydrogenases. Metal Ions in Life Sciences, 2014, 14, 71-97.	2.8	13
53	Structure, Function, and Mechanism of the Nickel Metalloenzymes, CO Dehydrogenase, and Acetyl-CoA Synthase. Chemical Reviews, 2014, 114, 4149-4174.	47.7	470
54	How oxygen reacts with oxygen-tolerant respiratory [NiFe]-hydrogenases. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 6606-6611.	7.1	75

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55	A unified model for surface electrocatalysis based on observations with enzymes. Physical Chemistry Chemical Physics, 2014, 16, 11822.	2.8	74
56	Unusual Reaction of [NiFe]-Hydrogenases with Cyanide. Journal of the American Chemical Society, 2014, 136, 10470-10477.	13.7	16
57	Selective Visible-Light-Driven CO₂ Reduction on a p-Type Dye-Sensitized NiO Photocathode. Journal of the American Chemical Society, 2014, 136, 13518-13521.	13.7	97
58	A Multi-Heme Flavoenzyme as a Solar Conversion Catalyst. Journal of the American Chemical Society, 2014, 136, 12876-12879.	13.7	34
59	Transforming an oxygen-tolerant [NiFe] uptake hydrogenase into a proficient, reversible hydrogen producer. Energy and Environmental Science, 2014, 7, 1426-1433.	30.8	61
60	Electrochemistry of Metalloproteins: Protein Film Electrochemistry for the Study of E. coli [NiFe]-Hydrogenase-1. Methods in Molecular Biology, 2014, 1122, 73-94.	0.9	16
61	Copying Biology's Ways with Hydrogen. Science, 2013, 339, 658-659.	12.6	16
62	How Light-Harvesting Semiconductors Can Alter the Bias of Reversible Electrocatalysts in Favor of H₂ Production and CO₂ Reduction. Journal of the American Chemical Society, 2013, 135, 15026-15032.	13.7	77
63	Energy and environment policy case for a global project on artificial photosynthesis. Energy and Environmental Science, 2013, 6, 695.	30.8	264
64	Crystal Structure of the O 2 -Tolerant Membrane-Bound Hydrogenase 1 from Escherichia coli in Complex with Its Cognate Cytochrome b. Structure, 2013, 21, 184-190.	3.3	93
65	Optimizing the power of enzyme-based membrane-less hydrogen fuel cells for hydrogen-rich H2â€“air mixtures. Energy and Environmental Science, 2013, 6, 2166.	30.8	61
66	Photons in biology. Interface Focus, 2013, 3, 20130039.	3.0	1
67	A Unified Electrocatalytic Description of the Action of Inhibitors of Nickel Carbon Monoxide Dehydrogenase. Journal of the American Chemical Society, 2013, 135, 2198-2206.	13.7	60
68	Principles of Sustained Enzymatic Hydrogen Oxidation in the Presence of Oxygen â€“ The Crucial Influence of High Potential Feâ€“S Clusters in the Electron Relay of [NiFe]-Hydrogenases. Journal of the American Chemical Society, 2013, 135, 2694-2707.	13.7	91
69	Investigations of Two Bidirectional Carbon Monoxide Dehydrogenases from <i>Carboxydothermus hydrogenoformans</i> by Protein Film Electrochemistry. ChemBioChem, 2013, 14, 1845-1851.	2.6	37
70	Electrochemistry of Hydrogenases. Electroanalytical Chemistry, A Series of Advances, 2013, , 33-104.	1.7	0
71	Electrocatalytic mechanism of reversible hydrogen cycling by enzymes and distinctions between the major classes of hydrogenases. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11516-11521.	7.1	158
72	Importance of the Protein Framework for Catalytic Activity of [FeFe]-Hydrogenases. Journal of Biological Chemistry, 2012, 287, 1489-1499.	3.4	129

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73	X-ray crystallographic and computational studies of the O ₂ -tolerant [NiFe]-hydrogenase 1 from <i>Escherichia coli</i>. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 5305-5310.	7.1	194
74	Order-of-magnitude enhancement of an enzymatic hydrogen-air fuel cell based on pyrenyl carbon nanostructures. Chemical Science, 2012, 3, 1015.	7.4	130
75	Visible light-driven CO₂reduction by enzyme coupled CdS nanocrystals. Chemical Communications, 2012, 48, 58-60.	4.1	184
76	EPR Spectroscopic Studies of the Feâ€"S Clusters in the O₂-Tolerant [NiFe]-Hydrogenase Hyd-1 from Escherichia coli and Characterization of the Unique [4Feâ€"3S] Cluster by HYSCORE. Journal of the American Chemical Society, 2012, 134, 15581-15594.	13.7	88
77	Inhibition of [FeFe]-Hydrogenases by Formaldehyde and Wider Mechanistic Implications for Biohydrogen Activation. Journal of the American Chemical Society, 2012, 134, 7553-7557.	13.7	31
78	Enzymes and bio-inspired electrocatalysts in solar fuel devices. Energy and Environmental Science, 2012, 5, 7470.	30.8	127
79	Editorial overview. Current Opinion in Chemical Biology, 2012, 16, 1-2.	6.1	35
80	How <i>Salmonella</i> oxidises H₂ under aerobic conditions. FEBS Letters, 2012, 586, 536-544.	2.8	34
81	Formaldehydeâ€"A Rapid and Reversible Inhibitor of Hydrogen Production by [FeFe]-Hydrogenases. Journal of the American Chemical Society, 2011, 133, 1282-1285.	13.7	30
82	CO2 photoreduction at enzyme-modified metal oxide nanoparticles. Energy and Environmental Science, 2011, 4, 2393.	30.8	155
83	A unique iron-sulfur cluster is crucial for oxygen tolerance of a [NiFe]-hydrogenase. Nature Chemical Biology, 2011, 7, 310-318.	8.0	225
84	Oxygen-Tolerant [NiFe]-Hydrogenases: The Individual and Collective Importance of Supernumerary Cysteines at the Proximal Fe-S Cluster. Journal of the American Chemical Society, 2011, 133, 16881-16892.	13.7	118
85	Reversibility and efficiency in electrocatalytic energy conversion and lessons from enzymes. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 14049-14054.	7.1	310
86	A TiO2 Nanoparticle System for Sacrificial Solar H2 Production Prepared by Rational Combination of a Hydrogenase with a Ruthenium Photosensitizer. Methods in Molecular Biology, 2011, 743, 107-117.	0.9	6
87	Gas pressure effects on the rates of catalytic H2 oxidation by hydrogenases. Chemical Communications, 2010, 46, 8463.	4.1	1
88	How Escherichia coli Is Equipped to Oxidize Hydrogen under Different Redox Conditions. Journal of Biological Chemistry, 2010, 285, 3928-3938.	3.4	204
89	Characteristics of Enzyme-Based Hydrogen Fuel Cells Using an Oxygen-Tolerant Hydrogenase as the Anodic Catalyst. Journal of Physical Chemistry C, 2010, 114, 12003-12009.	3.1	96
90	Efficient and Clean Photoreduction of CO₂ to CO by Enzyme-Modified TiO₂ Nanoparticles Using Visible Light. Journal of the American Chemical Society, 2010, 132, 2132-2133.	13.7	392

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91	Mechanistic studies of the â€˜blueâ€™ Cu enzyme, bilirubin oxidase, as a highly efficient electrocatalyst for the oxygen reduction reaction. Physical Chemistry Chemical Physics, 2010, 12, 13962.	2.8	184
92	A kinetic and thermodynamic understanding of O ₂ tolerance in [NiFe]-hydrogenases. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20681-20686.	7.1	130
93	Oxygen-tolerant H2 Oxidation by Membrane-bound [NiFe] Hydrogenases of Ralstonia Species. Journal of Biological Chemistry, 2009, 284, 465-477.	3.4	112
94	Dynamic electrochemical experiments on hydrogenases. Photosynthesis Research, 2009, 102, 541-550.	2.9	20
95	Dynamic electrochemical investigations of hydrogen oxidation and production by enzymes and implications for future technology. Chemical Society Reviews, 2009, 38, 36-51.	38.1	265
96	Visible Light-Driven H₂ Production by Hydrogenases Attached to Dye-Sensitized TiO₂ Nanoparticles. Journal of the American Chemical Society, 2009, 131, 18457-18466.	13.7	407
97	Waterâ^'Gas Shift Reaction Catalyzed by Redox Enzymes on Conducting Graphite Platelets. Journal of the American Chemical Society, 2009, 131, 14154-14155.	13.7	55
98	Catalytic electrochemistry of a [NiFeSe]-hydrogenase on TiO2 and demonstration of its suitability for visible-light driven H₂production. Chemical Communications, 2009, , 550-552.	4.1	160
99	Electrochemical Kinetic Investigations of the Reactions of [FeFe]-Hydrogenases with Carbon Monoxide and Oxygen: Comparing the Importance of Gas Tunnels and Active-Site Electronic/Redox Effects. Journal of the American Chemical Society, 2009, 131, 14979-14989.	13.7	167
100	How oxygen attacks [FeFe] hydrogenases from photosynthetic organisms. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17331-17336.	7.1	302
101	Enzymes as Working or Inspirational Electrocatalysts for Fuel Cells and Electrolysis. Chemical Reviews, 2008, 108, 2439-2461.	47.7	918
102	A Natural Choice for Activating Hydrogen. Science, 2008, 321, 498-499.	12.6	53
103	The Difference a Se Makes? Oxygen-Tolerant Hydrogen Production by the [NiFeSe]-Hydrogenase from <i>Desulfomicrobium baculatum</i>. Journal of the American Chemical Society, 2008, 130, 13410-13416.	13.7	172
104	Hydrogen Production under Aerobic Conditions by Membrane-Bound Hydrogenases from Ralstonia Species. Journal of the American Chemical Society, 2008, 130, 11106-11113.	13.7	94
105	Enzymatic Oxidation of H₂ in Atmospheric O₂:â€‰ The Electrochemistry of Energy Generation from Trace H₂ by Aerobic Microorganisms. Journal of the American Chemical Society, 2008, 130, 424-425.	13.7	57
106	Why did Nature choose manganese to make oxygen?. Philosophical Transactions of the Royal Society B: Biological Sciences, 2008, 363, 1263-1270.	4.0	164
107	Voltammetry of Adsorbed Redox Enzymes: Mechanisms in The Potential Dimension. , 2008, , 91-128.		10
108	Investigating and Exploiting the Electrocatalytic Properties of Hydrogenases. Chemical Reviews, 2007, 107, 4366-4413.	47.7	687

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109	A stable electrode for high-potential, electrocatalytic O_2 reduction based on rational attachment of a blue copper oxidase to a graphite surface. Chemical Communications, 2007, , 1710.	4.1	285
110	Enzymatic catalysis on conducting graphite particles. Nature Chemical Biology, 2007, 3, 761-762.	8.0	63
111	Rapid and Efficient Electrocatalytic CO₂/CO Interconversions by <i>Carboxydothermus </i><i>hydrogenoformans</i> CO Dehydrogenase I on an Electrode. Journal of the American Chemical Society, 2007, 129, 10328-10329.	13.7	181
112	Electrochemical Investigations of the Interconversions between Catalytic and Inhibited States of the [FeFe]-Hydrogenase fromDesulfovibriodesulfuricans. Journal of the American Chemical Society, 2006, 128, 16808-16815.	13.7	78
113	Electricity from low-level H_2 in still air ? an ultimate test for an oxygen tolerant hydrogenase. Chemical Communications, 2006, , 5033.	4.1	126
114	Rapid and Reversible Reactions of [NiFe]-Hydrogenases with Sulfide. Journal of the American Chemical Society, 2006, 128, 7448-7449.	13.7	55
115	Application of Power Spectra Patterns in Fourier Transform Square Wave Voltammetry To Evaluate Electrode Kinetics of Surface-Confined Proteins. Analytical Chemistry, 2006, 78, 2948-2956.	6.5	41
116	The pyrolytic graphite surface as an enzyme substrate: microscopic and spectroscopic studies. Journal of Solid State Electrochemistry, 2006, 10, 826-832.	2.5	55
117	Fumarate Reductase and Succinate Oxidase Activity of Escherichia coli Complex II Homologs Are Perturbed Differently by Mutation of the Flavin Binding Domain. Journal of Biological Chemistry, 2006, 281, 11357-11365.	3.4	49
118	A Proton Delivery Pathway in the Soluble Fumarate Reductase from Shewanella frigidimarina. Journal of Biological Chemistry, 2006, 281, 20589-20597.	3.4	47
119	Recent developments in dynamic electrochemical studies of adsorbed enzymes and their active sites. Current Opinion in Chemical Biology, 2005, 9, 110-117.	6.1	181
120	From The Cover: Electrocatalytic hydrogen oxidation by an enzyme at high carbon monoxide or oxygen levels. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 16951-16954.	7.1	250
121	Electrochemical Definitions of O_2 Sensitivity and Oxidative Inactivation in Hydrogenases. Journal of the American Chemical Society, 2005, 127, 18179-18189.	13.7	208
122	Investigating Metalloenzyme Reactions Using Electrochemical Sweeps and Steps:Â Fine Control and Measurements with Reactants Ranging from Ions to Gases. Inorganic Chemistry, 2005, 44, 798-809.	4.0	46
123	The Mechanism of Activation of a [NiFe]-Hydrogenase by Electrons, Hydrogen, and Carbon Monoxide. Journal of the American Chemical Society, 2005, 127, 6595-6604.	13.7	85
124	Electron Transfer and Catalytic Control by the Ironâˆ’Sulfur Clusters in a Respiratory Enzyme,E.coliFumarate Reductase. Journal of the American Chemical Society, 2005, 127, 6977-6989.	13.7	83
125	[NiFe]-hydrogenases: spectroscopic and electrochemical definition of reactions and intermediates. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2005, 363, 937-954.	3.4	56
126	Hydrogenases: active site puzzles and progress. Current Opinion in Chemical Biology, 2004, 8, 133-140.	6.1	184

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127	Fast, long-range electron-transfer reactions of a â€˜blueâ€™ copper protein coupled non-covalently to an electrode through a stilbenyl thiolate monolayer. Chemical Communications, 2004, , 316-317.	4.1	28
128	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
129	Electrochemical Potential-Step Investigations of the Aerobic Interconversions of [NiFe]-Hydrogenase fromAllochromatiumvinosum:Â Insights into the Puzzling Difference between Unready and Ready Oxidized Inactive States. Journal of the American Chemical Society, 2004, 126, 14899-14909.	13.7	133
130	Enzyme Electrokinetics:Â Using Protein Film Voltammetry To Investigate Redox Enzymes and Their Mechanismsâ€. Biochemistry, 2003, 42, 8653-8662.	2.5	266
131	Voltammetry of a â€˜protein on a ropeâ€™. FEBS Letters, 2003, 539, 91-94.	2.8	21
132	Hydrogenase on an electrode: a remarkable heterogeneous catalyst. Dalton Transactions, 2003, , 4152-4157.	3.3	40
133	Enzyme Electrokinetics:Â Electrochemical Studies of the Anaerobic Interconversions between Active and Inactive States ofAllochromatium vinosum[NiFe]-hydrogenase. Journal of the American Chemical Society, 2003, 125, 8505-8514.	13.7	151
134	Effect of a Dispersion of Interfacial Electron Transfer Rates on Steady State Catalytic Electron Transport in [NiFe]-hydrogenase and Other Enzymes. Journal of Physical Chemistry B, 2002, 106, 13058-13063.	2.6	248
135	Direct comparison of the electrocatalytic oxidation of hydrogen by an enzyme and a platinum catalystElectronic supplementary information (ESI) available: Levich plots at 1% and 10% hydrogen, and a comparison of the effect of carbon monoxide on oxidation currents obtained at platinum and enzyme-modified electrodes. See http://www.rsc.org/suppdata/cc/b2/b201337a/. Chemical Communications, 2002, , 866-867.	4.1	226
136	Insights into Gated Electron-Transfer Kinetics at the Electrodeâ˘'Protein Interface:â€‰ A Square Wave Voltammetry Study of the Blue Copper Protein Azurin. Journal of Physical Chemistry B, 2002, 106, 2304-2313.	2.6	130
137	Insights from protein film voltammetry into mechanisms of complex biological electron-transfer reactionsBased on the presentation given at Dalton Discussion No. 4, 10â€"13th January 2002, Kloster Banz, Germany.. Dalton Transactions RSC, 2002, , 661-671.	2.3	102
138	A Voltammetric Study of Interdomain Electron Transfer within Sulfite Oxidase. Journal of the American Chemical Society, 2002, 124, 11612-11613.	13.7	90
139	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
140	Enzyme Electrokinetics:Â Hydrogen Evolution and Oxidation byAllochromatium vinosum[NiFe]-Hydrogenaseâ€. Biochemistry, 2002, 41, 15736-15746.	2.5	116
141	Protein Film Voltammetry: Revealing the Mechanisms of Biological Oxidation and Reduction. Russian Journal of Electrochemistry, 2002, 38, 49-62.	0.9	23
142	Electrochemistry of Peroxidases. , 2002, , 124-145.		0
143	Enzyme Electrokinetics:â€‰ Energetics of Succinate Oxidation by Fumarate Reductase and Succinate Dehydrogenase. Biochemistry, 2001, 40, 11234-11245.	2.5	88
144	Electrochemical Origin of Hysteresis in the Electron-Transfer Reactions of Adsorbed Proteins:Â Contrasting Behavior of the â€œBlueâ€• Copper Protein, Azurin, Adsorbed on Pyrolytic Graphite and Modified Gold Electrodes. Journal of Physical Chemistry B, 2001, 105, 5271-5282.	2.6	93

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145	Determination of an Optimal Potential Window for Catalysis by E. coli Dimethyl Sulfoxide Reductase and Hypothesis on the Role of Mo(V) in the Reaction Pathway. Biochemistry, 2001, 40, 3117-3126.	2.5	87
146	A Distal Histidine Mutant (H52Q) of Yeast CytochromecPeroxidase Catalyzes the Oxidation of H2O2Instead of Its Reduction. Journal of the American Chemical Society, 2001, 123, 9260-9263.	13.7	22
147	Influence of electrochemical properties in determining the sensitivity of [4Fe-4S] clusters in proteins to oxidative damage. Biochemical Journal, 2001, 360, 717-726.	3.7	18
148	Ferredoxin III of Desulfovibrio africanus: sequencing of the native gene and characterization of a histidine-tagged form. Biochemical Journal, 2000, 346, 375-384.	3.7	7
149	Recent developments in faradaic bioelectrochemistry. Electrochimica Acta, 2000, 45, 2623-2645.	5.2	455
150	Atomically defined mechanism for proton transfer to a buried redox centre in a protein. Nature, 2000, 405, 814-817.	27.8	161
151	The effect of pH and ligand exchange on the redox properties of blue copper proteins. Faraday Discussions, 2000, 116, 205-220.	3.2	40
152	Fast voltammetric studies of the kinetics and energetics of coupled electron-transfer reactions in proteins. Faraday Discussions, 2000, 116, 191-203.	3.2	87
153	Interruption and Time-Resolution of Catalysis by a Flavoenzyme Using Fast Scan Protein Film Voltammetry. Journal of the American Chemical Society, 2000, 122, 6494-6495.	13.7	40
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