Elisabeth Lojou

List of Publications by Year
in descending order

77 papers	3,244 citations	117625 34 h-index	161849 54 g-index
80 all docs	80 docs citations	80 times ranked	2597 citing authors

#	Article	IF	Citations
1	Electrochemistry of copper efflux oxidase-like multicopper oxidases involved in copper homeostasis. Current Opinion in Electrochemistry, 2022, 32, 100919.	4.8	2
2	Effects of interactions between SPEEK or Nafion ionomers and bilirubin oxidase on O2 enzymatic reduction. Electrochimica Acta, 2022, 426, 140787.	5.2	0
3	The pHâ€Induced Selectivity Between Cysteine or Histidine Coordinated Heme in an Artificial Î±â€Helical Metalloprotein. Angewandte Chemie - International Edition, 2021, 60, 3974-3978.	13.8	10
4	The pHâ€Induced Selectivity Between Cysteine or Histidine Coordinated Heme in an Artificial Î±â€Helical Metalloprotein. Angewandte Chemie, 2021, 133, 4020-4024.	2.0	2
5	Mutations in the coordination spheres of T1 Cu affect Cu2+-activation of the laccase from Thermus thermophilus. Biochimie, 2021, 182, 228-237.	2.6	8
6	From Enzyme Stability to Enzymatic Bioelectrode Stabilization Processes. Catalysts, 2021, 11, 497.	3.5	25
7	Enzymatic Bioelectrocatalysis. Catalysts, 2021, 11, 1373.	3.5	4
8	Interplay between Orientation at Electrodes and Copper Activation of <i>Thermus thermophilus</i> Laccase for O₂ Reduction. Journal of the American Chemical Society, 2020, 142, 1394-1405.	13.7	44
9	Recent advances in surface chemistry of electrodes to promote direct enzymatic bioelectrocatalysis. Current Opinion in Electrochemistry, 2020, 19, 113-121.	4.8	61
10	Implicit Modeling of the Impact of Adsorption on Solid Surfaces for Protein Mechanics and Activity with a Coarse-Grained Representation. Journal of Physical Chemistry B, 2020, 124, 8516-8523.	2.6	8
11	Nanosecond Laserâ€“Fabricated Monolayer of Gold Nanoparticles on ITO for Bioelectrocatalysis. Frontiers in Chemistry, 2020, 8, 431.	3.6	11
12	Controllable Display of Sequential Enzymes on Yeast Surface with Enhanced Biocatalytic Activity toward Efficient Enzymatic Biofuel Cells. Journal of the American Chemical Society, 2020, 142, 3222-3230.	13.7	58
13	In Situ Fluorescence Tomography Enables a 3D Mapping of Enzymatic O₂ Reduction at the Electrochemical Interface. Analytical Chemistry, 2020, 92, 7249-7256.	6.5	14
14	Microâ€and Nanoscopic Imaging of Enzymatic Electrodes: A Review. ChemElectroChem, 2019, 6, 5524-5546.	3.4	15
15	Enzymatic fuel cells in a microfluidic environment: Status and opportunities. A mini review. Electrochemistry Communications, 2019, 107, 106533.	4.7	30
16	Bacterial Respiratory Chain Diversity Reveals a Cytochrome <i>c</i> Oxidase Reducing O₂ at Low Overpotentials. Journal of the American Chemical Society, 2019, 141, 11093-11102.	13.7	19
17	Tackling the Challenges of Enzymatic (Bio)Fuel Cells. Chemical Reviews, 2019, 119, 9509-9558.	47.7	321
18	Pore size effect of MgO-templated carbon on enzymatic H2 oxidation by the hyperthermophilic hydrogenase from Aquifex aeolicus. Journal of Electroanalytical Chemistry, 2018, 812, 221-226.	3.8	27

#	ARTICLE	IF	CITATIONS
19	Electron transfer in an acidophilic bacterium: interaction between a diheme cytochrome and a cupredoxin. Chemical Science, 2018, 9, 4879-4891.	7.4	17
20	Electrostatic-Driven Activity, Loading, Dynamics, and Stability of a Redox Enzyme on Functionalized-Gold Electrodes for Bioelectrocatalysis. ACS Catalysis, 2018, 8, 12004-12014.	11.2	42
21	Direct electron transfer of bilirubin oxidase at a carbon flow-through electrode. Electrochimica Acta, 2018, 283, 88-96.	5.2	13
22	Controlling Redox Enzyme Orientation at Planar Electrodes. Catalysts, 2018, 8, 192.	3.5	78
23	Dihemic c4-type cytochrome acting as a surrogate electron conduit: Artificially interconnecting a photosystem I supercomplex with electrodes. Electrochemistry Communications, 2018, 91, 49-53.	4.7	6
24	Impact of copper ligand mutations on a cupredoxin with a green copper center. Biochimica Et Biophysica Acta - Bioenergetics, 2017, 1858, 351-359.	1.0	12
25	Interprotein Electron Transfer between FeSâ€Protein Nanowires and Oxygenâ€Tolerant NiFe Hydrogenase. Angewandte Chemie, 2017, 129, 7882-7886.	2.0	2
26	Interprotein Electron Transfer between FeSâ€Protein Nanowires and Oxygenâ€Tolerant NiFe Hydrogenase. Angewandte Chemie - International Edition, 2017, 56, 7774-7778.	13.8	16
27	Mechanism of Chloride Inhibition of Bilirubin Oxidases and Its Dependence on Potential and pH. ACS Catalysis, 2017, 7, 3916-3923.	11.2	44
28	H₂/O₂enzymatic fuel cells: from proof-of-concept to powerful devices. Sustainable Energy and Fuels, 2017, 1, 1475-1501.	4.9	69
29	Impact of substrate diffusion and enzyme distribution in 3D-porous electrodes: a combined electrochemical and modelling study of a thermostable H₂/O₂enzymatic fuel cell. Energy and Environmental Science, 2017, 10, 1966-1982.	30.8	93
30	Recent developments in high surface area bioelectrodes for enzymatic fuel cells. Current Opinion in Electrochemistry, 2017, 5, 74-84.	4.8	92
31	Impact of Carbon Nanotube Surface Chemistry on Hydrogen Oxidation by Membraneâ€Bound Oxygenâ€Tolerant Hydrogenases. ChemElectroChem, 2016, 3, 2179-2188.	3.4	23
32	How the Intricate Interactions between Carbon Nanotubes and Two Bilirubin Oxidases Control Direct and Mediated O₂ Reduction. ACS Applied Materials & Interfaces, 2016, 8, 23074-23085.	8.0	91
33	Efficiency of Enzymatic O₂ Reduction by <i>Myrothecium verrucaria</i> Bilirubin Oxidase Probed by Surface Plasmon Resonance, PMIRRAS, and Electrochemistry. ACS Catalysis, 2016, 6, 5482-5492.	11.2	44
34	A membraneless air-breathing hydrogen biofuel cell based on direct wiring of thermostable enzymes on carbon nanotube electrodes. Chemical Communications, 2015, 51, 7447-7450.	4.1	77
35	A H 2 /O 2 enzymatic fuel cell as a sustainable power for a wireless device. Electrochemistry Communications, 2015, 60, 216-220.	4.7	36
36	Hydrogen bioelectrooxidation on gold nanoparticle-based electrodes modified by Aquifex aeolicus hydrogenase: Application to hydrogen/oxygen enzymatic biofuel cells. Bioelectrochemistry, 2015, 106, 47-55.	4.6	37

#	Article	IF	Citations
37	Spectroscopic Characterization of a Green Copper Site in a Single-Domain Cupredoxin. PLoS ONE, 2014, 9, e98941.	2.5	28
38	Multiscale Simulations Give Insight into the Hydrogen In and Out Pathways of [NiFe]-Hydrogenases from <i>Aquifex aeolicus</i> and <i>Desulfovibrio fructosovorans</i>. Journal of Physical Chemistry B, 2014, 118, 13800-13811.	2.6	26
39	New trends in enzyme immobilization at nanostructured interfaces for efficient electrocatalysis in biofuel cells. Electrochimica Acta, 2014, 126, 104-114.	5.2	118
40	Design of a H2/O2 biofuel cell based on thermostable enzymes. Electrochemistry Communications, 2014, 42, 72-74.	4.7	74
41	Carbon nanofiber mesoporous films: efficient platforms for bio-hydrogen oxidation in biofuel cells. Physical Chemistry Chemical Physics, 2014, 16, 1366-1378.	2.8	42
42	Synthesis and enzymatic photo-activity of an O2 tolerant hydrogenaseâ€"CdSe@CdS quantum rod bioconjugate. Chemical Communications, 2014, 50, 4989-4992.	4.1	17
43	Reconstitution of supramolecular organization involved in energy metabolism at electrochemical interfaces for biosensing and bioenergy production. Analytical and Bioanalytical Chemistry, 2014, 406, 1011-1027.	3.7	18
44	The weak, fluctuating, dipole moment of membrane-bound hydrogenase from Aquifex aeolicus accounts for its adaptability to charged electrodes. Physical Chemistry Chemical Physics, 2014, 16, 11318-11322.	2.8	31
45	Biohydrogen for a New Generation of H₂/O₂ Biofuel Cells: A Sustainable Energy Perspective. ChemElectroChem, 2014, 1, 1724-1750.	3.4	61
46	Light-induced reactivation of O2-tolerant membrane-bound [Niâ€"Fe] hydrogenase from the hyperthermophilic bacterium Aquifex aeolicus under turnover conditions. Physical Chemistry Chemical Physics, 2013, 15, 16463.	2.8	16
47	Carbon nanoparticulate films as effective scaffolds for mediatorless bioelectrocatalytic hydrogen oxidation. Electrochimica Acta, 2013, 111, 434-440.	5.2	11
48	Exploring Properties of a Hyperthermophilic Membraneâ€Bound Hydrogenase at Carbon Nanotube Modified Electrodes for a Powerful H₂/O₂ Biofuel Cell. Electroanalysis, 2013, 25, 685-695.	2.9	22
49	Mineral respiration under extreme acidic conditions: from a supramolecular organization to a molecular adaptation in <i>Acidithiobacillus ferrooxidans</i>. Biochemical Society Transactions, 2012, 40, 1324-1329.	3.4	31
50	An innovative powerful and mediatorless H2/O2 biofuel cell based on an outstanding bioanode. Electrochemistry Communications, 2012, 23, 25-28.	4.7	71
51	A friendly detergent for H2 oxidation by Aquifex aeolicus membrane-bound hydrogenase immobilized on graphite and Self-Assembled-Monolayer-modified gold electrodes. Electrochimica Acta, 2012, 82, 115-125.	5.2	15
52	The Hyperthermophilic Bacterium Aquifex aeolicus. Advances in Microbial Physiology, 2012, 61, 125-194.	2.4	35
53	Electrochemistry, AFM, and PMâ€IRRA Spectroscopy of Immobilized Hydrogenase: Role of a Hydrophobic Helix in Enzyme Orientation for Efficient H₂ Oxidation. Angewandte Chemie - International Edition, 2012, 51, 953-956.	13.8	79
54	Hydrogenases as catalysts for fuel cells: Strategies for efficient immobilization at electrode interfaces. Electrochimica Acta, 2011, 56, 10385-10397.	5.2	95

#	Article	IF	Citations
55	Hydrogen bioelectrooxidation in ionic liquids: From cytochrome c3 redox behavior to hydrogenase activity. Electrochimica Acta, 2011, 56, 3359-3368.	5.2	18
56	Aquifex aeolicus membrane hydrogenase for hydrogen biooxidation: Role of lipids and physiological partners in enzyme stability and activity. International Journal of Hydrogen Energy, 2010, 35, 10778-10789.	7.1	35
57	Membrane-Bound Hydrogenase I from the Hyperthermophilic Bacterium <i>Aquifex aeolicus</i>: Enzyme Activation, Redox Intermediates and Oxygen Tolerance. Journal of the American Chemical Society, 2010, 132, 6991-7004.	13.7	145
58	Stabilization Role of a Phenothiazine Derivative on the Electrocatalytic Oxidation of Hydrogen via <i>Aquifex aeolicus</i> Hydrogenase at Graphite Membrane Electrodes. Langmuir, 2010, 26, 18534-18541.	3.5	34
59	Immobilization of the hyperthermophilic hydrogenase from Aquifex aeolicus bacterium onto gold and carbon nanotube electrodes for efficient H2 oxidation. Journal of Biological Inorganic Chemistry, 2009, 14, 1275-1288.	2.6	75
60	Biocatalysts for fuel cells: efficient hydrogenase orientation for H2 oxidation at electrodes modified with carbon nanotubes. Journal of Biological Inorganic Chemistry, 2008, 13, 1157-1167.	2.6	76
61	Hydrogenases from the hyperthermophilic bacterium Aquifex aeolicus: electrocatalysis of the hydrogen production/consumption reactions at carbon electrodes. Journal of Electroanalytical Chemistry, 2005, 577, 79-86.	3.8	14
62	Direct electrochemistry and enzymatic activity of bacterial polyhemic cytochrome c3 incorporated in clay films. Journal of Electroanalytical Chemistry, 2005, 579, 199-213.	3.8	37
63	The Type I / Type II Cytochrome c3 Complex: an Electron Transfer Link in the Hydrogen-Sulfate Reduction Pathway. Journal of Molecular Biology, 2005, 354, 73-90.	4.2	38
64	Insight into Molecular Stability and Physiological Properties of the Diheme Cytochrome CYC41from the Acidophilic BacteriumAcidithiobacillus ferrooxidans. Biochemistry, 2005, 44, 6471-6481.	2.5	33
65	Membrane Electrodes for Protein and Enzyme Electrochemistry. Electroanalysis, 2004, 16, 1113-1121.	2.9	37
66	Electrocatalytic Reactions at Hydrogenase-Modified Electrodes and Their Applications to Biosensors: From the Isolated Enzymes to the Whole Cells. Electroanalysis, 2004, 16, 1093-1100.	2.9	22
67	Adsorption of acid proteins onto auto-assembled polyelectrolyte or basic protein films â€“ application to electrocatalytic reactions controlled by hydrogenase. Journal of Electroanalytical Chemistry, 2004, 573, 159-167.	3.8	5
68	Buildup of Polyelectrolyteâˆ’Protein Multilayer Assemblies on Gold Electrodes. Role of the Hydrophobic Effect. Langmuir, 2004, 20, 748-755.	3.5	72
69	Electrochemical study of the intermolecular electron transfer to Pseudomonas aeruginosa cytochrome cd1 nitrite reductase. Electrochimica Acta, 2003, 48, 1055-1064.	5.2	28
70	Electrochemical studies on small electron transfer proteins using membrane electrodes. Journal of Electroanalytical Chemistry, 2003, 541, 153-162.	3.8	40
71	Quartz crystal microbalance and voltammetry monitoring for layer-by-layer assembly of cytochrome c3 and poly(ester sulfonic acid) films on gold and silver electrodes. Journal of Electroanalytical Chemistry, 2003, 557, 37-47.	3.8	17
72	Effects of Deletion of Genes Encoding Fe-Only Hydrogenase of Desulfovibrio vulgaris Hildenborough on Hydrogen and Lactate Metabolism. Journal of Bacteriology, 2002, 184, 679-686.	2.2	81

#	Article	IF	Citations
73	Hydrogenase Activity Control at Desulfovibrio vulgaris Cell-Coated Carbon Electrodes: Biochemical and Chemical Factors Influencing the Mediated Bioelectrocatalysis. Electroanalysis, 2002, 14, 913.	2.9	67
74	From the proteinâ€“polypeptide model system to the interaction between physiological partners using electrochemistry. Journal of Electroanalytical Chemistry, 2002, 523, 150-159.	3.8	10
75	Membrane electrodes can modulate the electrochemical response of redox proteinsâ€"direct electrochemistry of cytochrome c. Journal of Electroanalytical Chemistry, 2000, 485, 71-80.	3.8	41
76	Poly(esterâ€“sulfonic acid): modified carbon electrodes for the electrochemical study of c-type cytochromes. Electrochimica Acta, 1999, 44, 3341-3352.	5.2	21
77	Kinetic studies on the electron transfer between various c-type cytochromes and iron (III) using a voltammetric approach. Electrochimica Acta, 1998, 43, 2005-2013.	5.2	42