Frederic Gloaguen

List of Publications by Year
in descending order

84 papers	6,726 citations	53794 45 h-index	58581 82 g-index
89 all docs	89 docs citations	89 times ranked	3884 citing authors

#	Article	IF	Citations
1	Rhodium-based cathodes with ultra-low metal loading to increase the sustainability in the hydrogen evolution reaction. Journal of Environmental Chemical Engineering, 2022, 10, 107682.	6.7	6
2	Oxo-functionalised mesoionic NHC nickel complexes for selective electrocatalytic reduction of CO₂ to formate. Green Chemistry, 2021, 23, 3365-3373.	9.0	10
3	Electrochemically Driven Reduction of Carbon Dioxide Mediated by Monoâ€Reduced Moâ€Diimine Tetracarbonyl Complexes: Electrochemical, Spectroelectrochemical and Theoretical Studies. ChemElectroChem, 2021, 8, 1899-1910.	3.4	2
4	Influence of QD photosensitizers in the photocatalytic production of hydrogen with biomimetic [FeFe]-hydrogenase. Comparative performance of CdSe and CdTe. Chemosphere, 2021, 278, 130485.	8.2	8
5	Why Cobalt macrocyclic complexes are not efficient catalysts for the oxygen reduction reaction, under acidic conditions. Electrochimica Acta, 2020, 358, 136854.	5.2	3
6	Electrocatalytic Proton Reduction by a Cobalt Complex Containing a Protonâ€Responsive Bis(alkylimdazole)methane Ligand: Involvement of a Câˆ'H Bond in H₂Formation. Chemistry - A European Journal, 2020, 26, 12560-12569.	3.3	8
7	Comprehensive review and future perspectives on the photocatalytic hydrogen production. Journal of Chemical Technology and Biotechnology, 2019, 94, 3049-3063.	3.2	136
8	Insights into the radical-radical and radical-substrate dimerization processes for substituted phenylmethylenepyrans. Electrochimica Acta, 2019, 305, 304-311.	5.2	4
9	Selective Earth-Abundant System for CO₂ Reduction: Comparing Photo- and Electrocatalytic Processes. ACS Catalysis, 2019, 9, 2091-2100.	11.2	80
10	Spectral radiative analysis of bio-inspired H2 production in a benchmark photoreactor: A first investigation using spatial photonic balance. International Journal of Hydrogen Energy, 2018, 43, 8221-8231.	7.1	9
11	Reversible Redox Switching of Chromophoric Phenylmethylenepyrans by Carbonâ€"Carbon Bond Making/Breaking. Journal of Organic Chemistry, 2017, 82, 12395-12405.	3.2	12
12	Electronic and molecular structure relations in diiron compounds mimicking the [FeFe]-hydrogenase active site studied by X-ray spectroscopy and quantum chemistry. Dalton Transactions, 2017, 46, 12544-12557.	3.3	8
13	Electrochemistry of Simple Organometallic Models of Ironâ€"Iron Hydrogenases in Organic Solvent and Water. Inorganic Chemistry, 2016, 55, 390-398.	4.0	44
14	Study of the magnetization behavior of ferromagnetic nanowire array: Existence of growth defects revealed by micromagnetic simulations. Journal of Magnetism and Magnetic Materials, 2016, 401, 378-385.	2.3	9
15	Electrochemical and Computational Study of the Reactivity of a Diiron Azadithiolate Complex towards Protons in the Presence of Coordinating Anions. European Journal of Inorganic Chemistry, 2015, 2015, 4986-4990.	2.0	4
16	Concerted proton-coupled electron transfer from a metal-hydride complex. Nature Chemistry, 2015, 7, 140-145.	13.6	88
17	A molecular material based on electropolymerized cobalt macrocycles for electrocatalytic hydrogen evolution. Physical Chemistry Chemical Physics, 2015, 17, 13374-13379.	2.8	6
18	Application of the energetic span model to the electrochemical catalysis of proton reduction by a diiron azadithiolate complex. New Journal of Chemistry, 2015, 39, 8073-8079.	2.8	7

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19	Photocatalytic Hydrogen Production Using Models of the Ironâ€“Iron Hydrogenase Active Site Dispersed in Micellar Solution. ChemSusChem, 2014, 7, 638-643.	6.8	60
20	A super-efficient cobalt catalyst for electrochemical hydrogen production from neutral water with 80 mV overpotential. Energy and Environmental Science, 2014, 7, 329-334.	30.8	121
21	Mechanistic Insights into the Catalysis of Electrochemical Proton Reduction by a Diiron Azadithiolate Complex. Inorganic Chemistry, 2014, 53, 10667-10673.	4.0	42
22	Electrocatalytic hydrogen evolution from neutral water by molecular cobalt tripyridineâ€“diamine complexes. Chemical Communications, 2013, 49, 9455.	4.1	91
23	Tetranuclear Iron Complexes Bearing Benzenetetrathiolate Bridges as Four-Electron Transformation Templates and Their Electrocatalytic Properties for Proton Reduction. Inorganic Chemistry, 2013, 52, 1798-1806.	4.0	31
24	Kinetic and thermodynamic aspects of the electrocatalysis of acid reduction in organic solvent using molecular diiron-dithiolate compounds. Electrochimica Acta, 2013, 110, 641-645.	5.2	22
25	Electrochemistry of cytochrome c immobilized on cardiolipin-modified electrodes: A probe for proteinâ€“lipid interactions. Biochimica Et Biophysica Acta - General Subjects, 2013, 1830, 2798-2803.	2.4	10
26	A Binuclear Ironâ€“Thiolate Catalyst for Electrochemical Hydrogen Production in Aqueous Micellar Solution. Chemistry - A European Journal, 2012, 18, 13473-13479.	3.3	37
27	Multielectronâ€Transfer Templates via Consecutive Twoâ€Electron Transformations: Ironâ€“Sulfur Complexes Relevant to Biological Enzymes. Chemistry - A European Journal, 2012, 18, 13968-13973.	3.3	31
28	Electrochemical hydrogen production in aqueous micellar solution by a diiron benzenedithiolate complex relevant to [FeFe] hydrogenases. Energy and Environmental Science, 2012, 5, 7757.	30.8	101
29	Diiron species containing a cyclic P^{Ph}₂N^{Ph}₂diphosphine related to the [FeFe]H₂ases active site. Chemical Communications, 2011, 47, 878-880.	4.1	31
30	Oxidatively Induced Reactivity of [Fe₂(CO)₄(Îº²-dppe)(Î¼-pdt)]: an Electrochemical and Theoretical Study of the Structure Change and Ligand Binding Processes. Inorganic Chemistry, 2011, 50, 12575-12585.	4.0	33
31	Diiron Complexes with a [2Fe3S] Core Related to the Active Site of [FeFe]H2ases. European Journal of Inorganic Chemistry, 2011, 2011, 1038-1042.	2.0	10
32	Magnetic crossover effect in Nickel nanowire arrays. Physica B: Condensed Matter, 2011, 406, 2046-2053.	2.7	20
33	Reactivity of [Fe₂(CO)₆(Î¼-S₂)] toward a Base-Containing Diphosphine (Ph₂PCH₂)₂NCH₃: Formation of Diiron Carbonyl Compounds Having Polydentate Heterofunctionalized Phosphine (PNS =) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 177 T (Ph₂PS = PS) Bridges. Organometallics, 2010, 29, 1296-1301.	2.8	11
34	Non-innocent bma ligand in a dissymetrically disubstituted diiron dithiolate related to the active site of the [FeFe] hydrogenases. Journal of Inorganic Biochemistry, 2010, 104, 1038-1042.	3.5	36
35	Tuning of electron transfer in diiron azo-bridged complexes relevant to hydrogenases. International Journal of Hydrogen Energy, 2010, 35, 10797-10802.	7.1	23
36	Magnetic properties of ferromagnetic nanowire arrays: Theory and experiment. Journal of Physics: Conference Series, 2010, 200, 072032.	0.4	10

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37	Effect of Electron-Withdrawing Dithiolate Bridge on the Electron-Transfer Steps in Diiron Molecules Related to [2Fe]_H Subsite of the [FeFe]-Hydrogenases. Inorganic Chemistry, 2010, 49, 2496-2501.	4.0	52
38	Investigation on the Protonation of a Trisubstituted [Fe₂(CO)₃(PPh₃)(Îº²-phen)(Î¼-pdt)] Complex: Rotated versus Unrotated Intermediate Pathways. Inorganic Chemistry, 2010, 49, 5003-5008.	4.0	31
39	Effects of anodization and electrodeposition conditions on the growth of copper and cobalt nanostructures in aluminum oxide films. Journal of Applied Electrochemistry, 2009, 39, 719-725.	2.9	9
40	Electrochemical study of the role of a H-bridged, unsymmetrically disubstituted diiron complex in proton reduction catalysis. Journal of Electroanalytical Chemistry, 2009, 626, 161-170.	3.8	49
41	Modeling [FeFe] hydrogenase: Synthesis and protonation of a diiron dithiolate complex containing a phosphine-N-heterocyclic-carbene ligand. Journal of Organometallic Chemistry, 2009, 694, 2801-2807.	1.8	47
42	Electron and proton transfers at diiron dithiolate sites relevant to the catalysis of proton reduction by the [FeFe]-hydrogenases. Coordination Chemistry Reviews, 2009, 253, 1476-1494.	18.8	298
43	Small molecule mimics of hydrogenases: hydrides and redox. Chemical Society Reviews, 2009, 38, 100-108.	38.1	615
44	Influence of a Pendant Amine in the Second Coordination Sphere on Proton Transfer at a Dissymmetrically Disubstituted Diiron System Related to the [2Fe]_H Subsite of [FeFe]H₂ase. Inorganic Chemistry, 2009, 48, 2-4.	4.0	147
45	Thermal Evolution of Magnetic Interactions in Ni Nanowires Embedded in Polycarbonate Membranes by Ferromagnetic Resonance. Acta Physica Polonica A, 2009, 116, 1039-1043.	0.5	8
46	On the electrochemistry of diiron dithiolate complexes related to the active site of the [FeFe]H2ase. Comptes Rendus Chimie, 2008, 11, 842-851.	0.5	46
47	Electrochemical Insights into the Mechanisms of Proton Reduction by [Fe₂(CO)₆{Î¼â€SCH₂N(R)CH₂S}] Complexes Related to the [2Fe]_H Subsite of [FeFe]Hydrogenase. Chemistry - A European Journal, 2008, 14, 1954-1964.	3.3	95
48	Organometallic Diiron Complex Chemistry Related to the [2Fe]_H Subsite of [FeFe]H₂ase. European Journal of Inorganic Chemistry, 2008, 2008, 4671-4681.	2.0	76
49	Diiron chelate complexes relevant to the active site of the iron-only hydrogenase. Comptes Rendus Chimie, 2008, 11, 906-914.	0.5	47
50	First insights into the protonation of dissymetrically disubstituted di-iron azadithiolate models of the [FeFe]H2ases active site. Chemical Communications, 2008, , 2547.	4.1	48
51	New Nitrosyl Derivatives of Diiron Dithiolates Related to the Active Site of the [FeFe]-Hydrogenases. Inorganic Chemistry, 2008, 47, 11816-11824.	4.0	27
52	Phosphorus Functionalized Carbenes: Synthesis and Coordination Properties. Phosphorus, Sulfur and Silicon and the Related Elements, 2008, 183, 669-670.	1.6	0
53	Electrochemical and theoretical investigations of the reduction of [Fe2(CO)5L{Âµ-SCH2XCH2S}] complexes related to [FeFe] hydrogenase. New Journal of Chemistry, 2007, 31, 2052.	2.8	98
54	Evidence for the Formation of Terminal Hydrides by Protonation of an Asymmetric Iron Hydrogenase Active Site Mimic. Inorganic Chemistry, 2007, 46, 3426-3428.	4.0	209

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55	Electron-Transfer-Catalyzed Rearrangement of Unsymmetrically Substituted Diiron Dithiolate Complexes Related to the Active Site of the [FeFe]-Hydrogenases. Inorganic Chemistry, 2007, 46, 9863-9872.	4.0	98
56	N-Heterocyclic Carbene Ligands in Nonsymmetric Diiron Models of Hydrogenase Active Sites. Organometallics, 2007, 26, 2042-2052.	2.3	141
57	Electrochemical Synthesis of Mono- and Disubstituted Diiron Dithiolate Complexes as Models for the Active Site of Iron-Only Hydrogenases. European Journal of Inorganic Chemistry, 2007, 2007, 5062-5068.	2.0	32
58	Carboxy-functionalized dithiolate di-iron complexes related to the active site of Fe-only hydrogenase. Journal of Organometallic Chemistry, 2007, 692, 4177-4181.	1.8	17
59	Use of 1,10-phenanthroline in diiron dithiolate derivatives related to the [Feâ€“Fe] hydrogenase active site. Dalton Transactions, 2007, , 3754.	3.3	65
60	Electrochemical proton reduction at mild potentials by monosubstituted diiron organometallic complexes bearing a benzenedithiolate bridge. Journal of Electroanalytical Chemistry, 2007, 603, 15-20.	3.8	63
61	Activation of proton by the two-electron reduction of a di-iron organometallic complex. Journal of Electroanalytical Chemistry, 2006, 595, 47-52.	3.8	119
62	Catalysis of the electrochemical H evolution by di-iron sub-site models. Coordination Chemistry Reviews, 2005, 249, 1664-1676.	18.8	253
63	Chemically modified electrode based on an organometallic model of the [FeFe] hydrogenase active center. Electrochemistry Communications, 2005, 7, 427-430.	4.7	62
64	N-Heterocyclic Carbene Ligands as Cyanide Mimics in Diiron Models of the All-Iron Hydrogenase Active Site. Organometallics, 2005, 24, 2020-2022.	2.3	149
65	Electrochemical proton reduction by thiolate-bridged hexacarbonyldiiron clusters. Journal of Electroanalytical Chemistry, 2004, 566, 241-247.	3.8	135
66	Di-Iron Aza Diphosphido Complexes:Â Mimics for the Active Site of Fe-Only Hydrogenase, and Effects of Changing the Coordinating Atoms of the Bridging Ligand in [Fe2{Î¼-(ECH2)2NR}(CO)6]. Inorganic Chemistry, 2004, 43, 8203-8205.	4.0	66
67	Title is missing!. Journal of Applied Electrochemistry, 2003, 33, 1-8.	2.9	50
68	Bimetallic Carbonyl Thiolates as Functional Models for Fe-Only Hydrogenases. Inorganic Chemistry, 2002, 41, 6573-6582.	4.0	221
69	Oxygen electroreduction on carbon-supported platinum catalysts. Particle-size effect on the tolerance to methanol competition. Electrochimica Acta, 2002, 47, 3431-3440.	5.2	196
70	Biomimetic Hydrogen Evolution Catalyzed by an Iron Carbonyl Thiolate. Journal of the American Chemical Society, 2001, 123, 9476-9477.	13.7	441
71	Synthetic and Structural Studies on [Fe2(SR)2(CN)x(CO)6-x]x- as Active Site Models for Fe-Only Hydrogenases. Journal of the American Chemical Society, 2001, 123, 12518-12527.	13.7	284
72	Title is missing!. Journal of Applied Electrochemistry, 2001, 31, 945-952.	2.9	85

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73	Electrochemical and spontaneous deposition of ruthenium at platinum electrodes for methanol oxidation: an electrochemical quartz crystal microbalance study. Electrochimica Acta, 2001, 46, 4331-4337.	5.2	60
74	In Situ Infrared Study of Carbon Monoxide Adsorbed onto Commercial Fuel-Cell-Grade Carbon-Supported Platinum Nanoparticles:Â Correlation with13C NMR Results. Journal of Physical Chemistry B, 2000, 104, 5803-5807.	2.6	75
75	An electrochemical quartz crystal microbalance study of the hydrogen underpotential deposition at a Pt electrode. Journal of Electroanalytical Chemistry, 1999, 467, 186-192.	3.8	41
76	Platinum electrodeposition on graphite: electrochemical study and STM imaging. Electrochimica Acta, 1999, 44, 1805-1816.	5.2	145
77	An evaluation of the macro-homogeneous and agglomerate model for oxygen reduction in PEMFCs. Electrochimica Acta, 1998, 43, 3767-3772.	5.2	95
78	Title is missing!. Journal of Applied Electrochemistry, 1997, 27, 1052-1060.	2.9	195
79	Simulations of PEFC cathodes: an effectiveness factor approach. Journal of Applied Electrochemistry, 1997, 27, 1029-1035.	2.9	64
80	Oxygen reduction on well-defined platinum nanoparticles inside recast ionomer. Electrochimica Acta, 1996, 41, 307-314.	5.2	140
81	Kinetic study of electrochemical reactions at catalyst-recast ionomer interfaces from thin active layer modelling. Journal of Applied Electrochemistry, 1994, 24, 863-869.	2.9	203
82	Particle size effect for oxygen reduction and methanol oxidation on Pt/C inside a proton exchange membrane. Journal of Electroanalytical Chemistry, 1994, 373, 251-254.	3.8	145
83	Electrochemistry of dinuclear, thiolate-bridged transition-metal compounds. 7. Electrochemical generation of isomers of [Mo2Cp2(CO)2(.mu.-SMe)2] and their reactivity toward isocyanide ligands. Organometallics, 1991, 10, 2004-2011.	2.3	15
84	Electrochemistry of dinuclear, thiolate-bridged transition-metal compounds. 7. Electrochemical generation of isomers of [Mo2Cp2(CO)2(.mu.-SMe)2] and their reactivity toward isocyanide ligands [Erratum to document cited in CA115(2):17413c]. Organometallics, 1991, 10, 3412-3412.	2.3	0