Marc Fontecave

List of Publications by Year
in descending order

251	25,770	5558 82	7718 150
papers	citations	h-index	g-index

370	370	370	20260
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Designing a Znâ€“Ag Catalyst Matrix and Electrolyzer System for CO₂ Conversion to CO and Beyond. Advanced Materials, 2022, 34, e2103963.	11.1	41
2	Gas diffusion electrodes, reactor designs and key metrics of low-temperature CO2 electrolysers. Nature Energy, 2022, 7, 130-143.	19.8	237
3	From Nickel Foam to Highly Active NiFeâ€based Oxygen Evolution Catalysts. ChemElectroChem, 2022, 9, .	1.7	3
4	Understanding the Photocatalytic Reduction of CO₂with Heterometallic Molybdenum(V) Phosphate Polyoxometalates in Aqueous Media. ACS Catalysis, 2022, 12, 453-464.	5.5	27
5	Keeping sight of copper in single-atom catalysts for electrochemical carbon dioxide reduction. Nature Communications, 2022, 13, 2280.	5.8	55
6	Molecular Inhibition for Selective CO₂ Conversion. Angewandte Chemie - International Edition, 2022, 61, .	7.2	21
7	Molecular Inhibition for Selective CO₂ Conversion. Angewandte Chemie, 2022, 134, .	1.6	3
8	Dihydrouridine in the Transcriptome: New Life for This Ancient RNA Chemical Modification. ACS Chemical Biology, 2022, 17, 1638-1657.	1.6	9
9	Electrochemical CO₂ reduction on Cu single atom catalyst and Cu nanoclusters: an <i>ab initio</i> approach. Physical Chemistry Chemical Physics, 2022, 24, 15767-15775.	1.3	4
10	Origin of the Boosting Effect of Polyoxometalates in Photocatalysis: The Case of CO₂ Reduction by a Rh-Containing Metalâ€“Organic Framework. ACS Catalysis, 2022, 12, 9244-9255.	5.5	22
11	Selective Ethylene Production from CO₂ and CO Reduction via Engineering Membrane Electrode Assembly with Porous Dendritic Copper Oxide. ACS Applied Materials & Interfaces, 2022, 14, 31933-31941.	4.0	16
12	Solarâ€Driven Electrochemical CO₂ Reduction with Heterogeneous Catalysts. Advanced Energy Materials, 2021, 11, 2002652.	10.2	67
13	Structural Evidence for a [4Feâ€5S] Intermediate in the Nonâ€Redox Desulfuration of Thiouracil. Angewandte Chemie, 2021, 133, 428-435.	1.6	0
14	Structural Evidence for a [4Feâ€5S] Intermediate in the Nonâ€Redox Desulfuration of Thiouracil. Angewandte Chemie - International Edition, 2021, 60, 424-431.	7.2	15
15	Artificial maturation of [FeFe] hydrogenase in a redox polymer film. Chemical Communications, 2021, 57, 1750-1753.	2.2	2
16	Electrochemical CO₂ Reduction to Ethanol with Copper-Based Catalysts. ACS Energy Letters, 2021, 6, 694-706.	8.8	130
17	Coupling Electrocatalytic CO₂ Reduction with Thermocatalysis Enables the Formation of a Lactone Monomer. ChemSusChem, 2021, 14, 2198-2204.	3.6	9
18	Ironâ€“sulfur biology invades tRNA modification: the case of U34 sulfuration. Nucleic Acids Research, 2021, 49, 3997-4007.	6.5	16

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19	Benchmarking of oxygen evolution catalysts on porous nickel supports. Joule, 2021, 5, 1281-1300.	11.7	74
20	Advancing the Anode Compartment for Energy Efficient CO₂ Reduction at Neutral pH. ChemElectroChem, 2021, 8, 2726-2736.	1.7	13
21	An enzymatic activation of formaldehyde for nucleotide methylation. Nature Communications, 2021, 12, 4542.	5.8	6
22	Bimetallic effects on Zn-Cu electrocatalysts enhance activity and selectivity for the conversion of CO2 to CO. Chem Catalysis, 2021, 1, 663-680.	2.9	42
23	Carbon Dioxide Reduction: A Bioinspired Catalysis Approach. Accounts of Chemical Research, 2021, 54, 4250-4261.	7.6	23
24	Structural and Functional Characterization of 4â€Hydroxyphenylacetate 3â€Hydroxylase from <i>Escherichia coli</i>. ChemBioChem, 2020, 21, 163-170.	1.3	21
25	Carbonâ€Nanotubeâ€Supported Copper Polyphthalocyanine for Efficient and Selective Electrocatalytic CO₂ Reduction to CO. ChemSusChem, 2020, 13, 173-179.	3.6	60
26	Mechanistic Understanding of CO₂ Reduction Reaction (CO2RR) Toward Multicarbon Products by Heterogeneous Copper-Based Catalysts. ACS Catalysis, 2020, 10, 1754-1768.	5.5	309
27	High-Current-Density CO2-to-CO Electroreduction on Ag-Alloyed Zn Dendrites at Elevated Pressure. Joule, 2020, 4, 395-406.	11.7	88
28	A Heterogeneous Recyclable Rhodiumâ€based Catalyst for the Reduction of Pyridine Dinucleotides and Flavins. ChemCatChem, 2020, 12, 1236-1243.	1.8	8
29	Immobilization of a Molecular Re Complex on MOFâ€derived Hierarchical Porous Carbon for CO₂ Electroreduction in Water/Ionic Liquid Electrolyte. ChemSusChem, 2020, 13, 6418-6425.	3.6	9
30	Functionalization of Carbon Nanotubes with Nickel Cyclam for the Electrochemical Reduction of CO₂. ChemSusChem, 2020, 13, 6449-6456.	3.6	27
31	Electroreduction of CO₂ to Formate with Low Overpotential using Cobalt Pyridine Thiolate Complexes. Angewandte Chemie - International Edition, 2020, 59, 15726-15733.	7.2	38
32	Electroreduction of CO 2 to Formate with Low Overpotential using Cobalt Pyridine Thiolate Complexes. Angewandte Chemie, 2020, 132, 15856-15863.	1.6	13
33	A bioinspired molybdenumâ€"copper molecular catalyst for CO₂ electroreduction. Chemical Science, 2020, 11, 5503-5510.	3.7	40
34	Co-immobilization of a Rh Catalyst and a Keggin Polyoxometalate in the UiO-67 Zr-Based Metalâ€"Organic Framework: In Depth Structural Characterization and Photocatalytic Properties for CO₂ Reduction. Journal of the American Chemical Society, 2020, 142, 9428-9438.	6.6	138
35	The O2-independent pathway of ubiquinone biosynthesis is essential for denitrification in Pseudomonas aeruginosa. Journal of Biological Chemistry, 2020, 295, 9021-9032.	1.6	25
36	A Single Molecular Stoichiometric Pâ€Source for Phaseâ€Selective Synthesis of Crystalline and Amorphous Iron Phosphide Nanocatalysts. ChemNanoMat, 2020, 6, 1208-1219.	1.5	6

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37	Copper-Substituted NiTiO₃ Ilmenite-Type Materials for Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2019, 11, 31038-31048.	4.0	8
38	Physiologically relevant reconstitution of iron-sulfur cluster biosynthesis uncovers persulfide-processing functions of ferredoxin-2 and frataxin. Nature Communications, 2019, 10, 3566.	5.8	107
39	Bio-inspired hydrophobicity promotes CO2 reduction on a Cu surface. Nature Materials, 2019, 18, 1222-1227.	13.3	507
40	Ubiquinone Biosynthesis over the Entire O ₂ Range: Characterization of a Conserved O ₂ -Independent Pathway. MBio, 2019, 10, .	1.8	34
41	Electroreduction of CO₂ on Singleâ€Site Copperâ€Nitrogenâ€Doped Carbon Material: Selective Formation of Ethanol and Reversible Restructuration of the Metal Sites. Angewandte Chemie, 2019, 131, 15242-15247.	1.6	43
42	Electroreduction of CO₂ on Singleâ€Site Copperâ€Nitrogenâ€Doped Carbon Material: Selective Formation of Ethanol and Reversible Restructuration of the Metal Sites. Angewandte Chemie - International Edition, 2019, 58, 15098-15103.	7.2	369
43	Shigella IpaA Binding to Talin Stimulates Filopodial Capture and Cell Adhesion. Cell Reports, 2019, 26, 921-932.e6.	2.9	17
44	A Soluble Metabolon Synthesizes the Isoprenoid Lipid Ubiquinone. Cell Chemical Biology, 2019, 26, 482-492.e7.	2.5	46
45	FeNC catalysts for CO₂ electroreduction to CO: effect of nanostructured carbon supports. Sustainable Energy and Fuels, 2019, 3, 1833-1840.	2.5	12
46	Controlling Hydrogen Evolution during Photoreduction of CO₂ to Formic Acid Using [Rh(R-bpy)(Cp*)Cl]⁺ Catalysts: A Structureâ€“Activity Study. Inorganic Chemistry, 2019, 58, 6893-6903.	1.9	31
47	Low-cost high-efficiency system for solar-driven conversion of CO ₂ to hydrocarbons. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9735-9740.	3.3	126
48	Bioinspired Artificial [FeFe]-Hydrogenase with a Synthetic H-Cluster. ACS Catalysis, 2019, 9, 4495-4501.	5.5	17
49	Thin Films of Fully Noble Metal-Free POM@MOF for Photocatalytic Water Oxidation. ACS Applied Materials & Interfaces, 2019, 11, 47837-47845.	4.0	58
50	Nickel Complexes Based on Molybdopterin-like Dithiolenes: Catalysts for CO₂ Electroreduction. Organometallics, 2019, 38, 1344-1350.	1.1	34
51	Znâ€“Cu Alloy Nanofoams as Efficient Catalysts for the Reduction of CO₂ to Syngas Mixtures with a Potentialâ€Independent H₂/CO Ratio. ChemSusChem, 2019, 12, 511-517.	3.6	49
52	Spectroscopic investigations of a semi-synthetic [FeFe] hydrogenase with propane di-selenol as bridging ligand in the binuclear subsite: comparison to the wild type and propane di-thiol variants. Journal of Biological Inorganic Chemistry, 2018, 23, 481-491.	1.1	13
53	A Fully Noble Metal-Free Photosystem Based on Cobalt-Polyoxometalates Immobilized in a Porphyrinic Metalâ€“Organic Framework for Water Oxidation. Journal of the American Chemical Society, 2018, 140, 3613-3618.	6.6	272
54	A Bioinspired Nickel(bis-dithiolene) Complex as a Homogeneous Catalyst for Carbon Dioxide Electroreduction. ACS Catalysis, 2018, 8, 2030-2038.	5.5	86

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55	Engineering an [FeFe]-Hydrogenase: Do Accessory Clusters Influence O₂ Resistance and Catalytic Bias?. Journal of the American Chemical Society, 2018, 140, 5516-5526.	6.6	48
56	Pyranopterin Related Dithiolene Molybdenum Complexes as Homogeneous Catalysts for CO₂ Photoreduction. Angewandte Chemie - International Edition, 2018, 57, 17033-17037.	7.2	40
57	Pyranopterin Related Dithiolene Molybdenum Complexes as Homogeneous Catalysts for CO 2 Photoreduction. Angewandte Chemie, 2018, 130, 17279-17283.	1.6	7
58	Immobilization of a Full Photosystem in the Largeâ€Pore MILâ€101 Metalâ€“Organic Framework for CO₂ reduction. ChemSusChem, 2018, 11, 3315-3322.	3.6	57
59	Molecular polypyridine-based metal complexes as catalysts for the reduction of CO₂. Chemical Society Reviews, 2017, 46, 761-796.	18.7	426
60	Electrochemical Reduction of CO₂ Catalyzed by Fe-N-C Materials: A Structureâ€“Selectivity Study. ACS Catalysis, 2017, 7, 1520-1525.	5.5	363
61	Rhenium Complexes Based on 2-Pyridyl-1,2,3-triazole Ligands: A New Class of CO₂ Reduction Catalysts. Inorganic Chemistry, 2017, 56, 2966-2976.	1.9	48
62	Molecular Cobalt Complexes with Pendant Amines for Selective Electrocatalytic Reduction of Carbon Dioxide to Formic Acid. Journal of the American Chemical Society, 2017, 139, 3685-3696.	6.6	256
63	Effect of Cations on the Structure and Electrocatalytic Response of Polyoxometalate-Based Coordination Polymers. Crystal Growth and Design, 2017, 17, 1600-1609.	1.4	50
64	Rutheniumâ€“cobalt dinuclear complexes as photocatalysts for CO₂ reduction. Chemical Communications, 2017, 53, 5040-5043.	2.2	19
65	Synthesis, Characterization, and DFT Analysis of Bis-Terpyridyl-Based Molecular Cobalt Complexes. Inorganic Chemistry, 2017, 56, 5930-5940.	1.9	52
66	New Cobaltâ€Bisterpyridyl Catalysts for Hydrogen Evolution Reaction. ChemCatChem, 2017, 9, 2099-2105.	1.8	36
67	Maximizing the Photocatalytic Activity of Metalâ€“Organic Frameworks with Aminated-Functionalized Linkers: Substoichiometric Effects in MIL-125-NH₂. Journal of the American Chemical Society, 2017, 139, 8222-8228.	6.6	195
68	Structural and functional characterization of the hydrogenase-maturation HydF protein. Nature Chemical Biology, 2017, 13, 779-784.	3.9	38
69	The UbiK protein is an accessory factor necessary for bacterial ubiquinone (UQ) biosynthesis and forms a complex with the UQ biogenesis factor UbiJ. Journal of Biological Chemistry, 2017, 292, 11937-11950.	1.6	35
70	A Dendritic Nanostructured Copper Oxide Electrocatalyst for the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2017, 56, 4792-4796.	7.2	201
71	A Dendritic Nanostructured Copper Oxide Electrocatalyst for the Oxygen Evolution Reaction. Angewandte Chemie, 2017, 129, 4870-4874.	1.6	41
72	The unusual ring scission of a quinoxaline-pyran-fused dithiolene system related to molybdopterin. Dalton Transactions, 2017, 46, 4161-4164.	1.6	10

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73	Site-isolated manganese carbonyl on bipyridine-functionalities of periodic mesoporous organosilicas: efficient CO₂ photoreduction and detection of key reaction intermediates. Chemical Science, 2017, 8, 8204-8213.	3.7	42
74	Enzyme Activation with a Synthetic Catalytic Coâ€•enzyme Intermediate: Nucleotide Methylation by Flavoenzymes. Angewandte Chemie - International Edition, 2017, 56, 12523-12527.	7.2	10
75	Nonredox thiolation in tRNA occurring via sulfur activation by a [4Fe-4S] cluster. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7355-7360.	3.3	44
76	Porous dendritic copper: an electrocatalyst for highly selective CO₂ reduction to formate in water/ionic liquid electrolyte. Chemical Science, 2017, 8, 742-747.	3.7	128
77	On the Role of Additional [4Fe-4S] Clusters with a Free Coordination Site in Radical-SAM Enzymes. Frontiers in Chemistry, 2017, 5, 17.	1.8	31
78	Artificial Hydrogenases Based on Cobaloximes and Heme Oxygenase. ChemPlusChem, 2016, 81, 1083-1089.	1.3	25
79	A cobalt complex with a bioinspired molybdopterin-like ligand: a catalyst for hydrogen evolution. Dalton Transactions, 2016, 45, 14754-14763.	1.6	33
80	Chemical assembly of multiple metal cofactors: The heterologously expressed multidomain [FeFe]-hydrogenase from Megasphaera elsdenii. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 1734-1740.	0.5	26
81	CO₂ Reduction to CO in Water: Carbon Nanotubeâ€"Gold Nanohybrid as a Selective and Efficient Electrocatalyst. ChemSusChem, 2016, 9, 2317-2320.	3.6	45
82	Cu/Cu₂O Electrodes and CO₂ Reduction to Formic Acid: Effects of Organic Additives on Surface Morphology and Activity. Chemistry - A European Journal, 2016, 22, 14029-14035.	1.7	33
83	Reactivity of the Excited States of the H-Cluster of FeFe Hydrogenases. Journal of the American Chemical Society, 2016, 138, 13612-13618.	6.6	25
84	Porousâ€"Hybrid Polymers as Platforms for Heterogeneous Photochemical Catalysis. ACS Applied Materials & Interfaces, 2016, 8, 19994-20002.	4.0	35
85	Synthesis and Reactivity of a Bioâ€•inspired Dithiolene Ligand and its Mo Oxo Complex. Chemistry - A European Journal, 2016, 22, 4447-4453.	1.7	13
86	A Simple and Nonâ€•Destructive Method for Assessing the Incorporation of Bipyridine Dicarboxylates as Linkers within Metalâ€"Organic Frameworks. Chemistry - A European Journal, 2016, 22, 3713-3718.	1.7	28
87	Synthesis, electrochemical and spectroscopic properties of ruthenium(<scp>ii</scp>) complexes containing 2,6-di(1H-imidazo[4,5-f][1,10]phenanthrolin-2-yl)aryl ligands. New Journal of Chemistry, 2016, 40, 1704-1714.	1.4	9
88	Electroâ€•Assisted Reduction of CO₂ to CO and Formaldehyde by (TOA)₆[Î±â€•SiW₁₁O₃₉Co(_)] Polyoxometalate. European Journal of Inorganic Chemistry, 2015, 2015, 3642-3648.	1.0	45
89	A Bioinspired Molybdenum Complex as a Catalyst for the Photoâ€•and Electroreduction of Protons. Angewandte Chemie - International Edition, 2015, 54, 14090-14093.	7.2	45
90	Artificial hydrogenases: biohybrid and supramolecular systems for catalytic hydrogen production or uptake. Current Opinion in Chemical Biology, 2015, 25, 36-47.	2.8	71

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91	From molecular copper complexes to composite electrocatalytic materials for selective reduction of CO₂ to formic acid. Journal of Materials Chemistry A, 2015, 3, 3901-3907.	5.2	69
92	Artificially maturated [FeFe] hydrogenase from Chlamydomonas reinhardtii: a HYSCORE and ENDOR study of a non-natural H-cluster. Physical Chemistry Chemical Physics, 2015, 17, 5421-5430.	1.3	39
93	Photocatalytic Carbon Dioxide Reduction with Rhodiumâ€based Catalysts in Solution and Heterogenized within Metalâ€"Organic Frameworks. ChemSusChem, 2015, 8, 603-608.	3.6	177
94	Versatile functionalization of carbon electrodes with a polypyridine ligand: metallation and electrocatalytic H⁺ and CO₂ reduction. Chemical Communications, 2015, 51, 2995-2998.	2.2	70
95	From Enzyme Maturation to Synthetic Chemistry: The Case of Hydrogenases. Accounts of Chemical Research, 2015, 48, 2380-2387.	7.6	63
96	Turning it off! Disfavouring hydrogen evolution to enhance selectivity for CO production during homogeneous CO₂ reduction by cobaltâ€"terpyridine complexes. Chemical Science, 2015, 6, 2522-2531.	3.7	152
97	Bioinspired Tungsten Dithiolene Catalysts for Hydrogen Evolution: A Combined Electrochemical, Photochemical, and Computational Study. Journal of Physical Chemistry B, 2015, 119, 13524-13533.	1.2	37
98	Spectroscopic Characterization of the Bridging Amine in the Active Site of [FeFe] Hydrogenase Using Isotopologues of the H-Cluster. Journal of the American Chemical Society, 2015, 137, 12744-12747.	6.6	64
99	Molecular Investigation of Ironâ€"Sulfur Cluster Assembly Scaffolds under Stress. Biochemistry, 2014, 53, 7867-7869.	1.2	27
100	TtcA a new tRNA-thioltransferase with an Fe-S cluster. Nucleic Acids Research, 2014, 42, 7960-7970.	6.5	57
101	An EPR/HYSCORE, MÃ¶ssbauer, and resonance Raman study of the hydrogenase maturation enzyme HydF: a model for N-coordination to [4Feâ€"4S] clusters. Journal of Biological Inorganic Chemistry, 2014, 19, 75-84.	1.1	24
102	Mimicking hydrogenases: From biomimetics to artificial enzymes. Coordination Chemistry Reviews, 2014, 270-271, 127-150.	9.5	426
103	Terpyridine complexes of first row transition metals and electrochemical reduction of CO₂ to CO. Physical Chemistry Chemical Physics, 2014, 16, 13635-13644.	1.3	154
104	ubiJ, a New Gene Required for Aerobic Growth and Proliferation in Macrophage, Is Involved in Coenzyme Q Biosynthesis in Escherichia coli and Salmonella enterica Serovar Typhimurium. Journal of Bacteriology, 2014, 196, 70-79.	1.0	38
105	An integrative computational model for large-scale identification of metalloproteins in microbial genomes: a focus on ironâ€"sulfur cluster proteins. Metallomics, 2014, 6, 1913-1930.	1.0	20
106	Theoretical Modeling of Lowâ€Energy Electronic Absorption Bands in Reduced Cobaloximes. ChemPhysChem, 2014, 15, 2951-2958.	1.0	11
107	Cobaloxime-Based Artificial Hydrogenases. Inorganic Chemistry, 2014, 53, 8071-8082.	1.9	78
108	Biosynthesis and physiology of coenzyme Q in bacteria. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1004-1011.	0.5	123

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109	Engineering the Optical Response of the Titanium-MIL-125 Metalâ€“Organic Framework through Ligand Functionalization. Journal of the American Chemical Society, 2013, 135, 10942-10945.	6.6	701
110	Spontaneous activation of [FeFe]-hydrogenases by an inorganic [2Fe] active site mimic. Nature Chemical Biology, 2013, 9, 607-609.	3.9	316
111	A Computational Study of the Mechanism of Hydrogen Evolution by Cobalt(Diimineâ€Dioxime) Catalysts. Chemistry - A European Journal, 2013, 19, 15166-15174.	1.7	91
112	Activation of a Unique Flavin-Dependent tRNA-Methylating Agent. Biochemistry, 2013, 52, 8949-8956.	1.2	27
113	Catalytic hydrogen production by a Niâ€“Ru mimic of NiFe hydrogenases involves a proton-coupled electron transfer step. Chemical Communications, 2013, 49, 5004.	2.2	54
114	Solar fuels generation and molecular systems: is it homogeneous or heterogeneous catalysis?. Chemical Society Reviews, 2013, 42, 2338-2356.	18.7	437
115	Molecular engineering of a cobalt-based electrocatalytic nanomaterial for H2 evolution under fully aqueous conditions. Nature Chemistry, 2013, 5, 48-53.	6.6	349
116	Artificial photosynthesis as a frontier technology for energy sustainability. Energy and Environmental Science, 2013, 6, 1074.	15.6	284
117	<i>In vivo</i> [<scp>F</scp>eâ€<scp>S</scp>] cluster acquisition by <scp>IscR</scp> and <scp>NsrR</scp>, two stress regulators in <i><scp>E</scp>scherichia coli</i>. Molecular Microbiology, 2013, 87, 493-508.	1.2	43
118	Two Fe-S clusters catalyze sulfur insertion by radical-SAM methylthiotransferases. Nature Chemical Biology, 2013, 9, 333-338.	3.9	113
119	Biomimetic assembly and activation of [FeFe]-hydrogenases. Nature, 2013, 499, 66-69.	13.7	597
120	Dye-sensitized nanostructured crystalline mesoporous tin-doped indium oxide films with tunable thickness for photoelectrochemical applications. Journal of Materials Chemistry A, 2013, 1, 8217.	5.2	33
121	ubiI, a New Gene in Escherichia coli Coenzyme Q Biosynthesis, Is Involved in Aerobic C5-hydroxylation. Journal of Biological Chemistry, 2013, 288, 20085-20092.	1.6	45
122	4-Demethylwyosine Synthase from Pyrococcus abyssi Is a Radical-S-adenosyl-l-methionine Enzyme with an Additional [4Fe-4S]+2 Cluster That Interacts with the Pyruvate Co-substrate. Journal of Biological Chemistry, 2012, 287, 41174-41185.	1.6	42
123	Flavin Conjugates for Delivery of Peptide Nucleic Acids. ChemBioChem, 2012, 13, 2593-2598.	1.3	11
124	FAD/Folate-Dependent tRNA Methyltransferase: Flavin as a New Methyl-Transfer Agent. Journal of the American Chemical Society, 2012, 134, 19739-19745.	6.6	39
125	Molecular organization, biochemical function, cellular role and evolution of NfuA, an atypical Feâ€S carrier. Molecular Microbiology, 2012, 86, 155-171.	1.2	80
126	Mesoporous Î±-Fe2O3 thin films synthesized via the solâ€“gel process for light-driven water oxidation. Physical Chemistry Chemical Physics, 2012, 14, 13224.	1.3	55

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127	A Janus cobalt-based catalytic material for electro-splitting of water. Nature Materials, 2012, 11, 802-807.	13.3	784
128	The methylthiolation reaction mediated by the Radical-SAM enzymes. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2012, 1824, 1223-1230.	1.1	27
129	Phosphine Coordination to a Cobalt Diimineâ€“Dioxime Catalyst Increases Stability during Light-Driven H₂ Production. Inorganic Chemistry, 2012, 51, 2115-2120.	1.9	98
130	Combined Experimentalâ€“Theoretical Characterization of the Hydrido-Cobaloxime [HCo(dmgH)₂(P<i>n</i>Bu₃)]. Inorganic Chemistry, 2012, 51, 7087-7093.	1.9	55
131	Cobalt stress in Escherichia coli and Salmonella enterica: molecular bases for toxicity and resistance. Metallomics, 2011, 3, 1130.	1.0	87
132	Artificial Photosynthesis: From Molecular Catalysts for Lightâ€driven Water Splitting to Photoelectrochemical Cells. Photochemistry and Photobiology, 2011, 87, 946-964.	1.3	273
133	Light-driven bioinspired water splitting: Recent developments in photoelectrode materials. Comptes Rendus Chimie, 2011, 14, 799-810.	0.2	20
134	Bioinspired catalysis at the crossroads between biology and chemistry: A remarkable example of an electrocatalytic material mimicking hydrogenases. Comptes Rendus Chimie, 2011, 14, 362-371.	0.2	29
135	Cp*^{â€“}â€Rutheniumâ€“Nickelâ€Based H₂â€Evolving Electrocatalysts as Bioâ€inspired Models of NiFe Hydrogenases. European Journal of Inorganic Chemistry, 2011, 2011, 1094-1099.	1.0	30
136	Further Characterization of the [FeFe]â€Hydrogenase Maturase HydG. European Journal of Inorganic Chemistry, 2011, 2011, 1121-1127.	1.0	23
137	Noncovalent Modification of Carbon Nanotubes with Pyreneâ€Functionalized Nickel Complexes: Carbon Monoxide Tolerant Catalysts for Hydrogen Evolution and Uptake. Angewandte Chemie - International Edition, 2011, 50, 1371-1374.	7.2	254
138	Splitting Water with Cobalt. Angewandte Chemie - International Edition, 2011, 50, 7238-7266.	7.2	1,231
139	Methylations: A Radical Mechanism. Chemistry and Biology, 2011, 18, 559-561.	6.2	1
140	Water electrolysis and photoelectrolysis on electrodes engineered using biological and bio-inspired molecular systems. Energy and Environmental Science, 2010, 3, 727.	15.6	192
141	Mechanism of hydrogen evolution catalyzed by NiFe hydrogenases: insights from a Niâ€“Ru model compound. Dalton Transactions, 2010, 39, 3043-3049.	1.6	39
142	Catalytic Transfer of Chiral Information from an Organic Compound to a Coordination Complex. ChemCatChem, 2010, 2, 1533-1534.	1.8	6
143	S-Adenosylmethionine-dependent radical-based modification of biological macromolecules. Current Opinion in Structural Biology, 2010, 20, 684-692.	2.6	52
144	Understanding Life as Molecules: Reductionism Versus Vitalism. Angewandte Chemie - International Edition, 2010, 49, 4016-4019.	7.2	16

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145	Maturation of [FeFe]-hydrogenases: Structures and mechanisms. International Journal of Hydrogen Energy, 2010, 35, 10750-10760.	3.8	24
146	A genetic analysis of the response of <i>Escherichia coli</i> to cobalt stress. Environmental Microbiology, 2010, 12, 2846-2857.	1.8	57
147	Identification of Eukaryotic and Prokaryotic Methylthiotransferase for Biosynthesis of 2-Methylthio-N6-threonylcarbamoyladenosine in tRNA. Journal of Biological Chemistry, 2010, 285, 28425-28433.	1.6	111
148	Iron-Sulfur (Fe-S) Cluster Assembly. Journal of Biological Chemistry, 2010, 285, 23331-23341.	1.6	119
149	Post-translational Modification of Ribosomal Proteins. Journal of Biological Chemistry, 2010, 285, 5792-5801.	1.6	59
150	H₂ Evolution and Molecular Electrocatalysts: Determination of Overpotentials and Effect of Homoconjugation. Inorganic Chemistry, 2010, 49, 10338-10347.	1.9	380
151	A structural and functional mimic of the active site of NiFe hydrogenases. Chemical Communications, 2010, 46, 5876.	2.2	101
152	Ironâ€“Sulfur Clusters in â€œRadical SAMâ€• Enzymes: Spectroscopy and Coordination. Biological Magnetic Resonance, 2010, , 53-82.	0.4	1
153	Native Escherichia coli SufA, Coexpressed with SufBCDSE, Purifies as a [2Feâ^'2S] Protein and Acts as an Feâ^'S Transporter to Feâ^'S Target Enzymes. Journal of the American Chemical Society, 2009, 131, 6149-6153.	6.6	89
154	The role of the maturase HydG in [FeFe]â€hydrogenase active site synthesis and assembly. FEBS Letters, 2009, 583, 506-511.	1.3	134
155	Cyclopentadienyl Rutheniumâ€“Nickel Catalysts for Biomimetic Hydrogen Evolution: Electrocatalytic Properties and Mechanistic DFT Studies. Chemistry - A European Journal, 2009, 15, 9350-9364.	1.7	61
156	The Zn center of the anaerobic ribonucleotide reductase from E. coli. Journal of Biological Inorganic Chemistry, 2009, 14, 923-933.	1.1	14
157	The CsdA cysteine desulphurase promotes Fe/S biogenesis by recruiting Suf components and participates to a new sulphur transfer pathway by recruiting CsdL (exâ€YgdL), a ubiquitinâ€modifyingâ€like protein. Molecular Microbiology, 2009, 74, 1527-1542.	1.2	52
158	Synthesis, crystal structure, magnetic properties and reactivity of a Niâ€“Ru model of NiFe hydrogenases with a pentacoordinated triplet (S=1) NiII center. Journal of Organometallic Chemistry, 2009, 694, 2866-2869.	0.8	33
159	Cobalt and nickel diimine-dioxime complexes as molecular electrocatalysts for hydrogen evolution with low overvoltages. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 20627-20632.	3.3	388
160	From Hydrogenases to Noble Metalâ€“Free Catalytic Nanomaterials for H ₂ Production and Uptake. Science, 2009, 326, 1384-1387.	6.0	886
161	Cobaloximeâ€Based Photocatalytic Devices for Hydrogen Production. Angewandte Chemie - International Edition, 2008, 47, 564-567.	7.2	400
162	New Light on Methylthiolation Reactions. Chemistry and Biology, 2008, 15, 209-210.	6.2	5

#	Article	IF	Citations
163	Modelling NiFe hydrogenases: nickel-based electrocatalysts for hydrogen production. Dalton Transactions, 2008, , 315-325.	1.6	142
164	The [4Feâ€“4S] cluster of quinolinate synthase from <i>Escherichia coli</i>: Investigation of cluster ligands. FEBS Letters, 2008, 582, 2937-2944.	1.3	26
165	Ironâ€“sulfur cluster biosynthesis in bacteria: Mechanisms of cluster assembly and transfer. Archives of Biochemistry and Biophysics, 2008, 474, 226-237.	1.4	159
166	Efficient H2-producing photocatalytic systems based on cyclometalated iridium- and tricarbonylrhenium-diimine photosensitizers and cobaloxime catalysts. Dalton Transactions, 2008, , 5567.	1.6	226
167	DNA Repair and Free Radicals, New Insights into the Mechanism of Spore Photoproduct Lyase Revealed by Single Amino Acid Substitution. Journal of Biological Chemistry, 2008, 283, 36361-36368.	1.6	62
168	X-ray Structure of the [FeFe]-Hydrogenase Maturase HydE from Thermotoga maritima. Journal of Biological Chemistry, 2008, 283, 18861-18872.	1.6	119
169	NfuA, a New Factor Required for Maturing Fe/S Proteins in Escherichia coli under Oxidative Stress and Iron Starvation Conditions. Journal of Biological Chemistry, 2008, 283, 14084-14091.	1.6	132
170	From Iron and Cysteine to Iron-Sulfur Clusters: the Biogenesis Protein Machineries. EcoSal Plus, 2008, 3, .	2.1	12
171	Cobalt Stress in Escherichia coli. Journal of Biological Chemistry, 2007, 282, 30442-30451.	1.6	160
172	Characterization of Arabidopsis thaliana SufE2 and SufE3. Journal of Biological Chemistry, 2007, 282, 18254-18264.	1.6	89
173	tRNA-modifying MiaE protein from<i>Salmonella typhimurium</i>is a nonheme diiron monooxygenase. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13295-13300.	3.3	44
174	SufE Transfers Sulfur from SufS to SufB for Iron-Sulfur Cluster Assembly. Journal of Biological Chemistry, 2007, 282, 13342-13350.	1.6	140
175	ErpA, an ironâ€“sulfur (Feâ€“S) protein of the A-type essential for respiratory metabolism in <i>Escherichia coli</i>. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 13626-13631.	3.3	134
176	The SUF iron-sulfur cluster biosynthetic machinery: Sulfur transfer from the SUFS-SUFE complex to SUFA. FEBS Letters, 2007, 581, 1362-1368.	1.3	42
177	Cobaloximes as Functional Models for Hydrogenases. 2. Proton Electroreduction Catalyzed by Difluoroborylbis(dimethylglyoximato)cobalt(II) Complexes in Organic Media. Inorganic Chemistry, 2007, 46, 1817-1824.	1.9	350
178	MiaB, a Bifunctional Radical-S-Adenosylmethionine Enzyme Involved in the Thiolation and Methylation of tRNA, Contains Two Essential [4Fe-4S] Clusters. Biochemistry, 2007, 46, 5140-5147.	1.2	111
179	Chiral-at-Metal Ruthenium Complex as a Metalloligand for Asymmetric Catalysis. Inorganic Chemistry, 2007, 46, 5354-5360.	1.9	45
180	Dinuclear Nickelâ€“Ruthenium Complexes as Functional Bio-Inspired Models of [NiFe] Hydrogenases. European Journal of Inorganic Chemistry, 2007, 2007, 2613-2626.	1.0	59

#	Article	IF	Citations
181	Characterization of the DNA repair spore photoproduct lyase enzyme from Clostridium acetobutylicum: A radical-SAM enzyme. Comptes Rendus Chimie, 2007, 10, 756-765.	0.2	12
182	The spore photoproduct lyase repairs the 5S- and not the 5R-configured spore photoproduct DNA lesion. Chemical Communications, 2006, , 445-447.	2.2	39
183	[Ni(xbsms)Ru(CO)2Cl2]: A Bioinspired Nickelâ^'Ruthenium Functional Model of [NiFe] Hydrogenase. Inorganic Chemistry, 2006, 45, 4334-4336.	1.9	66
184	Iron-sulfur clusters: ever-expanding roles. Nature Chemical Biology, 2006, 2, 171-174.	3.9	192
185	Sequence-Specific Nucleic Acid Damage Induced by Peptide Nucleic Acid Conjugates That Can Be Enzyme-Activated. Angewandte Chemie - International Edition, 2006, 45, 6859-6861.	7.2	5
186	Iron-Sulfur Cluster Biosynthesis. Journal of Biological Chemistry, 2006, 281, 16256-16263.	1.6	156
187	The [Fe-Fe]-Hydrogenase Maturation Protein HydF from Thermotoga maritima Is a GTPase with an Iron-Sulfur Cluster. Journal of Biological Chemistry, 2006, 281, 769-774.	1.6	119
188	Dinucleotide Spore Photoproduct, a Minimal Substrate of the DNA Repair Spore Photoproduct Lyase Enzyme from Bacillus subtilis. Journal of Biological Chemistry, 2006, 281, 26922-26931.	1.6	51
189	Some general principles for designing electrocatalysts with hydrogenase activity. Coordination Chemistry Reviews, 2005, 249, 1518-1535.	9.5	321
190	DNA Detection through Signal Amplification by Using NADH:Flavin Oxidoreductase and Oligonucleotide-Flavin Conjugates as Cofactors. Angewandte Chemie - International Edition, 2005, 44, 2764-2767.	7.2	31
191	DNA Detection through Signal Amplification by Using NADH:Flavin Oxidoreductase and Oligonucleotide-Flavin Conjugates as Cofactors. Angewandte Chemie, 2005, 117, 2824-2827.	1.6	14
192	Activation of the Anaerobic Ribonucleotide Reductase by S-Adenosylmethionine. ChemBioChem, 2005, 6, 1960-1962.	1.3	28
193	Mechanisms of ironâ€"sulfur cluster assembly: the SUF machinery. Journal of Biological Inorganic Chemistry, 2005, 10, 713-721.	1.1	102
194	Analysis of the Heteromeric CsdA-CsdE Cysteine Desulfurase, Assisting Fe-S Cluster Biogenesis in Escherichia coli. Journal of Biological Chemistry, 2005, 280, 26760-26769.	1.6	96
195	Proton Electroreduction Catalyzed by Cobaloximes:Â Functional Models for Hydrogenases. Inorganic Chemistry, 2005, 44, 4786-4795.	1.9	389
196	The flavin reductase ActVB fromStreptomyces coelicolor: Characterization of the electron transferase activity of the flavoprotein form. FEBS Letters, 2005, 579, 2817-2820.	1.3	13
197	Quinolinate synthetase, an iron-sulfur enzyme in NAD biosynthesis. FEBS Letters, 2005, 579, 3737-3743.	1.3	87
198	Biochemical characterization of the HydE and HydG iron-only hydrogenase maturation enzymes fromThermatoga maritima. FEBS Letters, 2005, 579, 5055-5060.	1.3	142

#	Article	IF	Citations
199	MiaB Protein Is a Bifunctional Radical-S-Adenosylmethionine Enzyme Involved in Thiolation and Methylation of tRNA. Journal of Biological Chemistry, 2004, 279, 47555-47563.	1.6	149
200	S-adenosylmethionine: nothing goes to waste. Trends in Biochemical Sciences, 2004, 29, 243-249.	3.7	496
201	SufA/IscA: reactivity studies of a class of scaffold proteins involved in [Fe-S] cluster assembly. Journal of Biological Inorganic Chemistry, 2004, 9, 828-838.	1.1	86
202	Crystallization-Induced Asymmetric Transformation of Chiral-at-metal Ruthenium(II) Complexes Bearing Achiral Ligands. Chemistry - A European Journal, 2004, 10, 2548-2554.	1.7	34
203	New flavin and deazaflavin oligonucleotide conjugates for the amperometric detection of DNA hybridization. Chemical Communications, 2004, , 1624-1625.	2.2	6
204	Biological Radical Sulfur Insertion Reactions. ChemInform, 2003, 34, no.	0.1	0
205	Biological Radical Sulfur Insertion Reactions. Chemical Reviews, 2003, 103, 2149-2166.	23.0	178
206	Mechanistic studies of the SufS-SufE cysteine desulfurase: evidence for sulfur transfer from SufS to SufE. FEBS Letters, 2003, 555, 263-267.	1.3	90
207	SufA from Erwinia chrysanthemi. Journal of Biological Chemistry, 2003, 278, 17993-18001.	1.6	85
208	MiaB Protein from Thermotoga maritima. Journal of Biological Chemistry, 2003, 278, 29515-29524.	1.6	59
209	Biogenesis of Fe-S Cluster by the Bacterial Suf System. Journal of Biological Chemistry, 2003, 278, 38352-38359.	1.6	194
210	A metal-binding site in the catalytic subunit of anaerobic ribonucleotide reductase. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3826-3831.	3.3	29
211	Reductive Cleavage of S-Adenosylmethionine by Biotin Synthase from Escherichia coli. Journal of Biological Chemistry, 2002, 277, 13449-13454.	1.6	59
212	Deoxyribonucleotide synthesis in anaerobic microorganisms: The class III ribonucleotide reductase. Progress in Molecular Biology and Translational Science, 2002, 72, 95-127.	1.9	47
213	Enzymatic Modification of tRNAs. Journal of Biological Chemistry, 2002, 277, 13367-13370.	1.6	98
214	Biotin Synthase Is a Pyridoxal Phosphate-Dependent Cysteine Desulfurase. Biochemistry, 2002, 41, 9145-9152.	1.2	53
215	The PLP-dependent biotin synthase from Escherichia coli : mechanistic studies. FEBS Letters, 2002, 532, 465-468.	1.3	38
216	Fluorescent Deazaflavin-Oligonucleotide Probes for Selective Detection of DNA. Angewandte Chemie - International Edition, 2002, 41, 486-489.	7.2	24

#	Article	IF	Citations
217	A Diferric Peroxo Complex with an Unprecedented Spin Configuration: AnS=2 System Arising from anS=5/2, 1/2 Pair. Angewandte Chemie - International Edition, 2002, 41, 617-620.	7.2	24
218	The iron-sulfur center of biotin synthase: site-directed mutants. Journal of Biological Inorganic Chemistry, 2002, 7, 83-93.	1.1	45
219	Chemistry for an essential biological process: the reduction of ferric iron. BioMetals, 2002, 15, 341-346.	1.8	133
220	Activation of Class III Ribonucleotide Reductase fromE. coli. The Electron Transfer from the Ironâ^'Sulfur Center toS-Adenosylmethionineâ€. Biochemistry, 2001, 40, 6713-6719.	1.2	46
221	Activation of Class III Ribonucleotide Reductase by Flavodoxin:Â A Protein Radical-Driven Electron Transfer to the Ironâ^'Sulfur Center. Biochemistry, 2001, 40, 3730-3736.	1.2	45
222	Adenosylmethionine as a source of 5â€²-deoxyadenosyl radicals. Current Opinion in Chemical Biology, 2001, 5, 506-512.	2.8	88
223	Mechanisms of formation of free radicals in biological catalysis. Comptes Rendus De L'Academie Des Sciences - Series IIc: Chemistry, 2001, 4, 531-538.	0.1	5
224	Activation of Class III Ribonucleotide Reductase by Thioredoxin. Journal of Biological Chemistry, 2001, 276, 9587-9589.	1.6	24
225	Iron-Sulfur Cluster Assembly. Journal of Biological Chemistry, 2001, 276, 22604-22607.	1.6	176
226	The Activating Component of the Anaerobic Ribonucleotide Reductase from Escherichia coli. Journal of Biological Chemistry, 2000, 275, 15669-15675.	1.6	58
227	Iron-Sulfur Center of Biotin Synthase and Lipoate Synthase. Biochemistry, 2000, 39, 4165-4173.	1.2	107
228	The NAD(P)H:Flavin Oxidoreductase from Escherichia coli. Journal of Biological Chemistry, 1999, 274, 18252-18260.	1.6	38
229	The Anaerobic Ribonucleotide Reductase from Escherichia coli. Journal of Biological Chemistry, 1999, 274, 31291-31296.	1.6	57
230	Iron and activated oxygen species in biology: the basic chemistry. , 1999, 12, 195-199.		227
231	Iron-sulfur interconversions in the anaerobic ribonucleotide reductase from Escherichia coli. Journal of Biological Inorganic Chemistry, 1999, 4, 614-620.	1.1	24
232	Enantioselective Sulfoxidation as a Probe for a Metal-Based Mechanism in H2O2-Dependent Oxidations Catalyzed by a Diiron Complex. Inorganic Chemistry, 1999, 38, 1261-1268.	1.9	76
233	The lipoate synthase from Escherichia coli is an iron-sulfur protein. FEBS Letters, 1999, 453, 25-28.	1.3	56
234	Assembly of 2Fe-2S and 4Fe-4S Clusters in the Anaerobic Ribonucleotide Reductase from Escherichia coli. Journal of the American Chemical Society, 1999, 121, 6344-6350.	6.6	62

#	Article	IF	Citations
235	Crystal Structure of NAD(P)H:Flavin Oxidoreductase from Escherichia coli,. Biochemistry, 1999, 38, 7040-7049.	1.2	86
236	Flavin-oligonucleotide conjugates: sequence specific photocleavage of DNA. Chemical Communications, 1998, , 2457-2458.	2.2	11
237	Reaction of the NAD(P)H:Flavin Oxidoreductase fromEscherichia coliwith NADPH and Riboflavin:Â Identification of Intermediatesâ€. Biochemistry, 1998, 37, 11879-11887.	1.2	28
238	Activation of the Anaerobic Ribonucleotide Reductase fromEscherichia coli. Journal of Biological Chemistry, 1997, 272, 24216-24223.	1.6	137
239	Method for Preparing New Flavin Derivatives:Â Synthesis of Flavinâ˘'Thymine Nucleotides and Flavinâ˘'Oligonucleotide Adducts. Journal of Organic Chemistry, 1997, 62, 3520-3528.	1.7	26
240	Is the NAD(P)H:Flavin Oxidoreductase from a Member of the Ferredoxin-NADP+ Reductase Family?. Journal of Biological Chemistry, 1996, 271, 16656-16661.	1.6	32
241	The Anaerobic Escherichia coli Ribonucleotide Reductase. Journal of Biological Chemistry, 1996, 271, 9410-9416.	1.6	83
242	The Free Radical of the Anaerobic Ribonucleotide Reductase from Escherichia coli Is at Glycine 681. Journal of Biological Chemistry, 1996, 271, 6827-6831.	1.6	133
243	Formate is the hydrogen donor for the anaerobic ribonucleotide reductase from Escherichia coli.. Proceedings of the National Academy of Sciences of the United States of America, 1995, 92, 8759-8762.	3.3	87
244	The Mechanism and Substrate Specificity of the NADPH:Flavin Oxidoreductase from Escherichia coli. Journal of Biological Chemistry, 1995, 270, 30392-30400.	1.6	109
245	Ferric reductases or flavin reductases?. BioMetals, 1994, 7, 3-8.	1.8	103
246	The NAD(P)H:flavin oxidoreductase from Escherichia coli as a source of superoxide radicals.. Journal of Biological Chemistry, 1994, 269, 8182-8188.	1.6	66
247	The NAD(P)H:flavin oxidoreductase from Escherichia coli as a source of superoxide radicals. Journal of Biological Chemistry, 1994, 269, 8182-8.	1.6	47
248	The anaerobic ribonucleoside triphosphate reductase from Escherichia coli requires S-adenosylmethionine as a cofactor.. Proceedings of the National Academy of Sciences of the United States of America, 1990, 87, 3314-3318.	3.3	80
249	NAD(P)H:flavin oxidoreductase of Escherichia coli. A ferric iron reductase participating in the generation of the free radical of ribonucleotide reductase.. Journal of Biological Chemistry, 1987, 262, 12325-12331.	1.6	172
250	Chiral-at-Metal Complexes as Asymmetric Catalysts. , 0, , 271-288.		96
251	A Soluble Metabolon Synthesizes the Isoprenoid Lipid Ubiquinone. SSRN Electronic Journal, 0, , .	0.4	0