Marc Fontecave

List of Publications by Year
in descending order

251 papers	25,770 citations	6486 82 h-index	8878 150 g-index
370 all docs	370 docs citations	370 times ranked	22910 citing authors

#	Article	IF	Citations
1	Splitting Water with Cobalt. Angewandte Chemie - International Edition, 2011, 50, 7238-7266.	7.2	1,231
2	From Hydrogenases to Noble Metalâ€“Free Catalytic Nanomaterials for H ₂ Production and Uptake. Science, 2009, 326, 1384-1387.	6.0	886
3	A Janus cobalt-based catalytic material for electro-splitting of water. Nature Materials, 2012, 11, 802-807.	13.3	784
4	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
5	Biomimetic assembly and activation of [FeFe]-hydrogenases. Nature, 2013, 499, 66-69.	13.7	597
6	Bio-inspired hydrophobicity promotes CO2 reduction on a Cu surface. Nature Materials, 2019, 18, 1222-1227.	13.3	507
7	S-adenosylmethionine: nothing goes to waste. Trends in Biochemical Sciences, 2004, 29, 243-249.	3.7	496
8	Solar fuels generation and molecular systems: is it homogeneous or heterogeneous catalysis?. Chemical Society Reviews, 2013, 42, 2338-2356.	18.7	437
9	Mimicking hydrogenases: From biomimetics to artificial enzymes. Coordination Chemistry Reviews, 2014, 270-271, 127-150.	9.5	426
10	Molecular polypyridine-based metal complexes as catalysts for the reduction of CO₂. Chemical Society Reviews, 2017, 46, 761-796.	18.7	426
11	Cobaloximeâ€Based Photocatalytic Devices for Hydrogen Production. Angewandte Chemie - International Edition, 2008, 47, 564-567.	7.2	400
12	Proton Electroreduction Catalyzed by Cobaloximes:Â Functional Models for Hydrogenases. Inorganic Chemistry, 2005, 44, 4786-4795.	1.9	389
13	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
14	H₂ Evolution and Molecular Electrocatalysts: Determination of Overpotentials and Effect of Homoconjugation. Inorganic Chemistry, 2010, 49, 10338-10347.	1.9	380
15	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
16	Electrochemical Reduction of CO₂ Catalyzed by Fe-N-C Materials: A Structureâ€“Selectivity Study. ACS Catalysis, 2017, 7, 1520-1525.	5.5	363
17	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
18	Molecular engineering of a cobalt-based electrocatalytic nanomaterial for H2 evolution under fully aqueous conditions. Nature Chemistry, 2013, 5, 48-53.	6.6	349

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19	Some general principles for designing electrocatalysts with hydrogenase activity. Coordination Chemistry Reviews, 2005, 249, 1518-1535.	9.5	321
20	Spontaneous activation of [FeFe]-hydrogenases by an inorganic [2Fe] active site mimic. Nature Chemical Biology, 2013, 9, 607-609.	3.9	316
21	Mechanistic Understanding of CO₂ Reduction Reaction (CO2RR) Toward Multicarbon Products by Heterogeneous Copper-Based Catalysts. ACS Catalysis, 2020, 10, 1754-1768.	5.5	309
22	Artificial photosynthesis as a frontier technology for energy sustainability. Energy and Environmental Science, 2013, 6, 1074.	15.6	284
23	Artificial Photosynthesis: From Molecular Catalysts for Lightâ€driven Water Splitting to Photoelectrochemical Cells. Photochemistry and Photobiology, 2011, 87, 946-964.	1.3	273
24	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
25	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
26	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
27	Gas diffusion electrodes, reactor designs and key metrics of low-temperature CO2 electrolysers. Nature Energy, 2022, 7, 130-143.	19.8	237
28	Iron and activated oxygen species in biology: the basic chemistry. , 1999, 12, 195-199.		227
29	Efficient H2-producing photocatalytic systems based on cyclometalated iridium- and tricarbonylrhenium-diimine photosensitizers and cobaloxime catalysts. Dalton Transactions, 2008, , 5567.	1.6	226
30	A Dendritic Nanostructured Copper Oxide Electrocatalyst for the Oxygen Evolution Reaction. Angewandte Chemie - International Edition, 2017, 56, 4792-4796.	7.2	201
31	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
32	Biogenesis of Fe-S Cluster by the Bacterial Suf System. Journal of Biological Chemistry, 2003, 278, 38352-38359.	1.6	194
33	Iron-sulfur clusters: ever-expanding roles. Nature Chemical Biology, 2006, 2, 171-174.	3.9	192
34	Water electrolysis and photoelectrolysis on electrodes engineered using biological and bio-inspired molecular systems. Energy and Environmental Science, 2010, 3, 727.	15.6	192
35	Biological Radical Sulfur Insertion Reactions. Chemical Reviews, 2003, 103, 2149-2166.	23.0	178
36	Photocatalytic Carbon Dioxide Reduction with Rhodiumâ€based Catalysts in Solution and Heterogenized within Metalâ€“Organic Frameworks. ChemSusChem, 2015, 8, 603-608.	3.6	177

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37	Iron-Sulfur Cluster Assembly. Journal of Biological Chemistry, 2001, 276, 22604-22607.	1.6	176
38	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
39	Cobalt Stress in Escherichia coli. Journal of Biological Chemistry, 2007, 282, 30442-30451.	1.6	160
40	Ironâ€"sulfur cluster biosynthesis in bacteria: Mechanisms of cluster assembly and transfer. Archives of Biochemistry and Biophysics, 2008, 474, 226-237.	1.4	159
41	Iron-Sulfur Cluster Biosynthesis. Journal of Biological Chemistry, 2006, 281, 16256-16263.	1.6	156
42	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
43	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
44	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
45	Biochemical characterization of the HydE and HydG iron-only hydrogenase maturation enzymes fromThermatoga maritima. FEBS Letters, 2005, 579, 5055-5060.	1.3	142
46	Modelling NiFe hydrogenases: nickel-based electrocatalysts for hydrogen production. Dalton Transactions, 2008, , 315-325.	1.6	142
47	SufE Transfers Sulfur from SufS to SufB for Iron-Sulfur Cluster Assembly. Journal of Biological Chemistry, 2007, 282, 13342-13350.	1.6	140
48	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
49	Activation of the Anaerobic Ribonucleotide Reductase fromEscherichia coli. Journal of Biological Chemistry, 1997, 272, 24216-24223.	1.6	137
50	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
51	The role of the maturase HydG in [FeFe]â€hydrogenase active site synthesis and assembly. FEBS Letters, 2009, 583, 506-511.	1.3	134
52	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
53	Chemistry for an essential biological process: the reduction of ferric iron. BioMetals, 2002, 15, 341-346.	1.8	133
54	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

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55	Electrochemical CO₂ Reduction to Ethanol with Copper-Based Catalysts. ACS Energy Letters, 2021, 6, 694-706.	8.8	130
56	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
57	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
58	Biosynthesis and physiology of coenzyme Q in bacteria. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 1004-1011.	0.5	123
59	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
60	X-ray Structure of the [FeFe]-Hydrogenase Maturase HydE from Thermotoga maritima. Journal of Biological Chemistry, 2008, 283, 18861-18872.	1.6	119
61	Iron-Sulfur (Fe-S) Cluster Assembly. Journal of Biological Chemistry, 2010, 285, 23331-23341.	1.6	119
62	Two Fe-S clusters catalyze sulfur insertion by radical-SAM methylthiotransferases. Nature Chemical Biology, 2013, 9, 333-338.	3.9	113
63	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
64	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
65	The Mechanism and Substrate Specificity of the NADPH:Flavin Oxidoreductase from Escherichia coli. Journal of Biological Chemistry, 1995, 270, 30392-30400.	1.6	109
66	Iron-Sulfur Center of Biotin Synthase and Lipoate Synthase. Biochemistry, 2000, 39, 4165-4173.	1.2	107
67	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
68	Ferric reductases or flavin reductases?. BioMetals, 1994, 7, 3-8.	1.8	103
69	Mechanisms of ironâ€“sulfur cluster assembly: the SUF machinery. Journal of Biological Inorganic Chemistry, 2005, 10, 713-721.	1.1	102
70	A structural and functional mimic of the active site of NiFe hydrogenases. Chemical Communications, 2010, 46, 5876.	2.2	101
71	Enzymatic Modification of tRNAs. Journal of Biological Chemistry, 2002, 277, 13367-13370.	1.6	98
72	Phosphine Coordination to a Cobalt Diimineâ€“Dioxime Catalyst Increases Stability during Light-Driven H₂ Production. Inorganic Chemistry, 2012, 51, 2115-2120.	1.9	98

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73	Chiral-at-Metal Complexes as Asymmetric Catalysts. , 0, , 271-288.		96
74	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
75	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
76	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
77	Characterization of Arabidopsis thaliana SufE2 and SufE3. Journal of Biological Chemistry, 2007, 282, 18254-18264.	1.6	89
78	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
79	Adenosylmethionine as a source of 5â€²-deoxyadenosyl radicals. Current Opinion in Chemical Biology, 2001, 5, 506-512.	2.8	88
80	High-Current-Density CO2-to-CO Electroreduction on Ag-Alloyed Zn Dendrites at Elevated Pressure. Joule, 2020, 4, 395-406.	11.7	88
81	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
82	Quinolinate synthetase, an iron-sulfur enzyme in NAD biosynthesis. FEBS Letters, 2005, 579, 3737-3743.	1.3	87
83	Cobalt stress in Escherichia coli and Salmonella enterica: molecular bases for toxicity and resistance. Metallomics, 2011, 3, 1130.	1.0	87
84	Crystal Structure of NAD(P)H:Flavin Oxidoreductase from Escherichia coli,. Biochemistry, 1999, 38, 7040-7049.	1.2	86
85	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
86	A Bioinspired Nickel(bis-dithiolene) Complex as a Homogeneous Catalyst for Carbon Dioxide Electroreduction. ACS Catalysis, 2018, 8, 2030-2038.	5.5	86
87	SufA from Erwinia chrysanthemi. Journal of Biological Chemistry, 2003, 278, 17993-18001.	1.6	85
88	The Anaerobic Escherichia coli Ribonucleotide Reductase. Journal of Biological Chemistry, 1996, 271, 9410-9416.	1.6	83
89	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
90	Molecular organization, biochemical function, cellular role and evolution of NfuA, an atypical Feâ€S carrier. Molecular Microbiology, 2012, 86, 155-171.	1.2	80

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91	Cobaloxime-Based Artificial Hydrogenases. Inorganic Chemistry, 2014, 53, 8071-8082.	1.9	78
92	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
93	Benchmarking of oxygen evolution catalysts on porous nickel supports. Joule, 2021, 5, 1281-1300.	11.7	74
94	Artificial hydrogenases: biohybrid and supramolecular systems for catalytic hydrogen production or uptake. Current Opinion in Chemical Biology, 2015, 25, 36-47.	2.8	71
95	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
96	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
97	Solarâ€Driven Electrochemical CO₂ Reduction with Heterogeneous Catalysts. Advanced Energy Materials, 2021, 11, 2002652.	10.2	67
98	[Ni(xbsms)Ru(CO)2Cl2]: A Bioinspired Nickelâˆ’Ruthenium Functional Model of [NiFe] Hydrogenase. Inorganic Chemistry, 2006, 45, 4334-4336.	1.9	66
99	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
100	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
101	From Enzyme Maturation to Synthetic Chemistry: The Case of Hydrogenases. Accounts of Chemical Research, 2015, 48, 2380-2387.	7.6	63
102	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
103	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
104	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
105	Carbonâ€Nanotubeâ€Supported Copper Polyphthalocyanine for Efficient and Selective Electrocatalytic CO₂ Reduction to CO. ChemSusChem, 2020, 13, 173-179.	3.6	60
106	Reductive Cleavage of S-Adenosylmethionine by Biotin Synthase from Escherichia coli. Journal of Biological Chemistry, 2002, 277, 13449-13454.	1.6	59
107	MiaB Protein from Thermotoga maritima. Journal of Biological Chemistry, 2003, 278, 29515-29524.	1.6	59
108	Dinuclear Nickelâ€"Ruthenium Complexes as Functional Bio-Inspired Models of [NiFe] Hydrogenases. European Journal of Inorganic Chemistry, 2007, 2007, 2613-2626.	1.0	59

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109	Post-translational Modification of Ribosomal Proteins. Journal of Biological Chemistry, 2010, 285, 5792-5801.	1.6	59
110	The Activating Component of the Anaerobic Ribonucleotide Reductase from Escherichia coli. Journal of Biological Chemistry, 2000, 275, 15669-15675.	1.6	58
111	Thin Films of Fully Noble Metal-Free POM@MOF for Photocatalytic Water Oxidation. ACS Applied Materials & Interfaces, 2019, 11, 47837-47845.	4.0	58
112	The Anaerobic Ribonucleotide Reductase from Escherichia coli. Journal of Biological Chemistry, 1999, 274, 31291-31296.	1.6	57
113	A genetic analysis of the response of <i>Escherichia coli</i> to cobalt stress. Environmental Microbiology, 2010, 12, 2846-2857.	1.8	57
114	TtcA a new tRNA-thioltransferase with an Fe-S cluster. Nucleic Acids Research, 2014, 42, 7960-7970.	6.5	57
115	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
116	The lipoate synthase from Escherichia coli is an iron-sulfur protein. FEBS Letters, 1999, 453, 25-28.	1.3	56
117	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
118	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
119	Keeping sight of copper in single-atom catalysts for electrochemical carbon dioxide reduction. Nature Communications, 2022, 13, 2280.	5.8	55
120	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
121	Biotin Synthase Is a Pyridoxal Phosphate-Dependent Cysteine Desulfurase. Biochemistry, 2002, 41, 9145-9152.	1.2	53
122	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
123	S-Adenosylmethionine-dependent radical-based modification of biological macromolecules. Current Opinion in Structural Biology, 2010, 20, 684-692.	2.6	52
124	Synthesis, Characterization, and DFT Analysis of Bis-Terpyridyl-Based Molecular Cobalt Complexes. Inorganic Chemistry, 2017, 56, 5930-5940.	1.9	52
125	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
126	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

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127	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
128	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
129	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
130	Deoxyribonucleotide synthesis in anaerobic microorganisms: The class III ribonucleotide reductase. Progress in Molecular Biology and Translational Science, 2002, 72, 95-127.	1.9	47
131	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
132	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
133	A Soluble Metabolon Synthesizes the Isoprenoid Lipid Ubiquinone. Cell Chemical Biology, 2019, 26, 482-492.e7.	2.5	46
134	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
135	The iron-sulfur center of biotin synthase: site-directed mutants. Journal of Biological Inorganic Chemistry, 2002, 7, 83-93.	1.1	45
136	Chiral-at-Metal Ruthenium Complex as a Metalloligand for Asymmetric Catalysis. Inorganic Chemistry, 2007, 46, 5354-5360.	1.9	45
137	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
138	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
139	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
140	CO₂ Reduction to CO in Water: Carbon Nanotubeâ€“Gold Nanohybrid as a Selective and Efficient Electrocatalyst. ChemSusChem, 2016, 9, 2317-2320.	3.6	45
141	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
142	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
143	<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
144	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

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145	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
146	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
147	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
148	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
149	A Dendritic Nanostructured Copper Oxide Electrocatalyst for the Oxygen Evolution Reaction. Angewandte Chemie, 2017, 129, 4870-4874.	1.6	41
150	Designing a Znâ€“Ag Catalyst Matrix and Electrolyzer System for CO₂ Conversion to CO and Beyond. Advanced Materials, 2022, 34, e2103963.	11.1	41
151	Pyranopterin Related Dithiolene Molybdenum Complexes as Homogeneous Catalysts for CO₂ Photoreduction. Angewandte Chemie - International Edition, 2018, 57, 17033-17037.	7.2	40
152	A bioinspired molybdenumâ€“copper molecular catalyst for CO₂ electroreduction. Chemical Science, 2020, 11, 5503-5510.	3.7	40
153	The spore photoproduct lyase repairs the 5S- and not the 5R-configured spore photoproduct DNA lesion. Chemical Communications, 2006, , 445-447.	2.2	39
154	Mechanism of hydrogen evolution catalyzed by NiFe hydrogenases: insights from a Niâ€“Ru model compound. Dalton Transactions, 2010, 39, 3043-3049.	1.6	39
155	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
156	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
157	The NAD(P)H:Flavin Oxidoreductase from Escherichia coli. Journal of Biological Chemistry, 1999, 274, 18252-18260.	1.6	38
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