Martin T Stiebritz

List of Publications by Year
in descending order

37 papers	822 citations	430442 18 h-index	500791 28 g-index
40 all docs	40 docs citations	40 times ranked	824 citing authors

#	Article	IF	Citations
1	Hydrogenases and oxygen. Chemical Science, 2012, 3, 1739.	3.7	87
2	Activation and reduction of carbon dioxide by nitrogenase iron proteins. Nature Chemical Biology, 2017, 13, 147-149.	3.9	52
3	Ambient conversion of CO2 to hydrocarbons by biogenic and synthetic [Fe4S4] clusters. Nature Catalysis, 2018, 1, 444-451.	16.1	51
4	Theoretical Study of Dioxygen Induced Inhibition of [FeFe]-Hydrogenase. Inorganic Chemistry, 2009, 48, 7127-7140.	1.9	50
5	Inaccessibility of the Î¼-hydride species in [FeFe] hydrogenases. Chemical Science, 2014, 5, 215-221.	3.7	48
6	Regioselectivity of H Cluster Oxidation. Journal of the American Chemical Society, 2011, 133, 20588-20603.	6.6	47
7	A Unifying Structural and Electronic Concept for Hmd and [FeFe] Hydrogenase Active Sites. Inorganic Chemistry, 2010, 49, 5818-5823.	1.9	40
8	Probing the coordination and function of Fe4S4 modules in nitrogenase assembly protein NifB. Nature Communications, 2018, 9, 2824.	5.8	40
9	The VEP1 gene (At4g24220) encodes a short-chain dehydrogenase/reductase with 3-oxo-Î”4,5-steroid 5Î²-reductase activity in Arabidopsis thaliana L.. Biochimie, 2009, 91, 517-525.	1.3	39
10	Analysis of differences in oxygen sensitivity of Feâ€"S clusters. Dalton Transactions, 2013, 42, 8729.	1.6	31
11	Evidence of substrate binding and product release via belt-sulfur mobilization of the nitrogenase cofactor. Nature Catalysis, 2022, 5, 443-454.	16.1	31
12	Kinetic Modeling of Hydrogen Conversion at [Fe] Hydrogenase Active-Site Models. Journal of Physical Chemistry B, 2013, 117, 4806-4817.	1.2	24
13	Tuning Electron Flux through Nitrogenase with Methanogen Iron Protein Homologues. Chemistry - A European Journal, 2017, 23, 16152-16156.	1.7	24
14	Xâ€Ray Crystallographic Analysis of NifB with a Full Complement of Clusters: Structural Insights into the Radical SAMâ€Dependent Carbide Insertion During Nitrogenase Cofactor Assembly. Angewandte Chemie - International Edition, 2021, 60, 2364-2370.	7.2	23
15	An enquiry into theoretical bioinorganic chemistry: How heuristic is the character of present-day quantum chemical methods?. Faraday Discussions, 2011, 148, 119-135.	1.6	22
16	Electric-field effects on the [FeFe]-hydrogenase active site. Chemical Communications, 2013, 49, 8099.	2.2	22
17	Activation Barriers of Oxygen Transformation at the Active Site of [FeFe] Hydrogenases. Inorganic Chemistry, 2014, 53, 11890-11902.	1.9	22
18	Oxygen Coordination to the Active Site of Hmd in Relation to [FeFe] Hydrogenase. European Journal of Inorganic Chemistry, 2011, 2011, 1163-1171.	1.0	18

#	Article	IF	Citations
19	MUMBO: a protein-design approach to crystallographic model building and refinement. Acta Crystallographica Section D: Biological Crystallography, 2006, 62, 648-658.	2.5	17
20	Structureâ€"Property Relationships of Fe₄S₄ Clusters. ChemPlusChem, 2013, 78, 1082-1098.	1.3	17
21	Reactivity of [Fe₄S₄] Clusters toward C1 Substrates: Mechanism, Implications, and Potential Applications. Accounts of Chemical Research, 2019, 52, 1168-1176.	7.6	15
22	Kinetic Consequences of Introducing a Proximal Selenocysteine Ligand into Cytochrome P450cam. Biochemistry, 2015, 54, 6692-6703.	1.2	14
23	Tracing the incorporation of the â€œninth sulfurâ€•into the nitrogenase cofactor precursor with selenite and tellurite. Nature Chemistry, 2021, 13, 1228-1234.	6.6	12
24	Strategies Towards Capturing Nitrogenase Substrates and Intermediates via Controlled Alteration of Electron Fluxes. Chemistry - A European Journal, 2019, 25, 2389-2395.	1.7	11
25	Structural Analysis of a Nitrogenase Iron Protein from Methanosarcina acetivorans: Implications for CO ₂ Capture by a Surface-Exposed [Fe ₄ S ₄] Cluster. MBio, 2019, 10, .	1.8	10
26	Structural and Mechanistic Insights into CO 2 Activation by Nitrogenase Iron Protein. Chemistry - A European Journal, 2019, 25, 13078-13082.	1.7	8
27	Computational Design of a Chain-Specific Tetracycline Repressor Heterodimer. Journal of Molecular Biology, 2010, 403, 371-385.	2.0	7
28	A role for [Fe4S4] clusters in tRNA recognitionâ€"a theoretical study. Nucleic Acids Research, 2014, 42, 5426-5435.	6.5	7
29	Binding of Reactive Oxygen Species at Feï£¿S Cubane Clusters. Chemistry - A European Journal, 2015, 21, 19081-19089.	1.7	7
30	Computational Methods for Modeling Metalloproteins. Methods in Molecular Biology, 2019, 1876, 245-266.	0.4	5
31	Mackinawiteâ€Supported Reduction of C₁ Substrates into Prebiotically Relevant Precursors. ChemSystemsChem, 2022, 4, .	1.1	4
32	Current Understanding of the Biosynthesis of the Unique Nitrogenase Cofactor Core. Structure and Bonding, 2018, , 15-31.	1.0	2
33	Xâ€Ray Crystallographic Analysis of NifB with a Full Complement of Clusters: Structural Insights into the Radical SAMâ€Dependent Carbide Insertion During Nitrogenase Cofactor Assembly. Angewandte Chemie, 2021, 133, 2394-2400.	1.6	2
34	MetREx: A protein design approach for the exploration of sequenceâ€reactivity relationships in metalloenzymes. Journal of Computational Chemistry, 2015, 36, 553-563.	1.5	1
35	Assembly and Function of Nitrogenase. , 2021, , 155-184.		1
36	Frontispiece: Tuning Electron Flux through Nitrogenase with Methanogen Iron Protein Homologues. Chemistry - A European Journal, 2017, 23, .	1.7	0

#	ARTICLE	IF	CITATIONS
37	Frontispiece: Structural and Mechanistic Insights into CO₂ Activation by Nitrogenase Iron Protein. Chemistry - A European Journal, 2019, 25, .	1.7	0