

# Oliver Lenz

## List of Publications by Citations

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118  
papers

5,544  
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41  
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71  
g-index

131  
ext. papers

6,054  
ext. citations

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5.54  
L-index

#	Paper	IF	Citations
118	The crystal structure of an oxygen-tolerant hydrogenase uncovers a novel iron-sulphur centre. <i>Nature</i> , <b>2011</b> , 479, 249-52	50.4	295
117	Electrocatalytic hydrogen oxidation by an enzyme at high carbon monoxide or oxygen levels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 16951-4	11.5	229
116	A unique iron-sulfur cluster is crucial for oxygen tolerance of a [NiFe]-hydrogenase. <i>Nature Chemical Biology</i> , <b>2011</b> , 7, 310-8	11.7	196
115	Electrochemical definitions of O <sub>2</sub> sensitivity and oxidative inactivation in hydrogenases. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 18179-89	16.4	193
114	Photosynthetic hydrogen production by a hybrid complex of photosystem I and [NiFe]-hydrogenase. <i>ACS Nano</i> , <b>2009</b> , 3, 4055-61	16.7	181
113	[NiFe]-hydrogenases of <i>Ralstonia eutropha</i> H16: modular enzymes for oxygen-tolerant biological hydrogen oxidation. <i>Journal of Molecular Microbiology and Biotechnology</i> , <b>2005</b> , 10, 181-96	0.9	177
112	Light-driven hydrogen production by a hybrid complex of a [NiFe]-hydrogenase and the cyanobacterial photosystem I. <i>Photochemistry and Photobiology</i> , <b>2006</b> , 82, 676-82	3.6	159
111	Oxygen tolerance of the H <sub>2</sub> -sensing [NiFe] hydrogenase from <i>Ralstonia eutropha</i> H16 is based on limited access of oxygen to the active site. <i>Journal of Biological Chemistry</i> , <b>2005</b> , 280, 23791-6	5.4	153
110	A novel multicomponent regulatory system mediates H <sub>2</sub> sensing in <i>Alcaligenes eutrophus</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>1998</b> , 95, 12474-9	11.5	150
109	The <i>Alcaligenes eutrophus</i> H16 <i>hoxX</i> gene participates in hydrogenase regulation. <i>Journal of Bacteriology</i> , <b>1994</b> , 176, 4385-93	3.5	148
108	Structure, function and biosynthesis of O <sub>2</sub> -tolerant hydrogenases. <i>Nature Reviews Microbiology</i> , <b>2013</b> , 11, 106-14	22.2	143
107	A kinetic and thermodynamic understanding of O <sub>2</sub> tolerance in [NiFe]-hydrogenases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 20681-6	11.5	122
106	Electricity from low-level H <sub>2</sub> in still air--an ultimate test for an oxygen tolerant hydrogenase. <i>Chemical Communications</i> , <b>2006</b> , 5033-5	5.8	116
105	The H <sub>2</sub> sensor of <i>Ralstonia eutropha</i> is a member of the subclass of regulatory [NiFe] hydrogenases. <i>Journal of Bacteriology</i> , <b>2000</b> , 182, 2716-24	3.5	112
104	Oxygen-tolerant H <sub>2</sub> oxidation by membrane-bound [NiFe] hydrogenases of <i>ralstonia</i> species. Coping with low level H <sub>2</sub> in air. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 465-477	5.4	107
103	Oxygen-tolerant [NiFe]-hydrogenases: the individual and collective importance of supernumerary cysteines at the proximal Fe-S cluster. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 16881-92	16.4	106
102	H <sub>2</sub> conversion in the presence of O <sub>2</sub> as performed by the membrane-bound [NiFe]-hydrogenase of <i>Ralstonia eutropha</i> . <i>ChemPhysChem</i> , <b>2010</b> , 11, 1107-19	3.2	97

101	Oxygen-tolerant hydrogenases in hydrogen-based technologies. <i>Current Opinion in Biotechnology</i> , <b>2011</b> , 22, 358-64	11.4	93
100	Hydrogen production under aerobic conditions by membrane-bound hydrogenases from <i>Ralstonia</i> species. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 11106-13	16.4	90
99	Spectroscopic insights into the oxygen-tolerant membrane-associated [NiFe] hydrogenase of <i>Ralstonia eutropha</i> H16. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 16264-16276	5.4	86
98	Boosting autofermentation rates and product yields with sodium stress cycling: application to production of renewable fuels by cyanobacteria. <i>Applied and Environmental Microbiology</i> , <b>2010</b> , 76, 6455-62	4.8	78
97	Reversible [4Fe-3S] cluster morphing in an O <sub>2</sub> -tolerant [NiFe] hydrogenase. <i>Nature Chemical Biology</i> , <b>2014</b> , 10, 378-85	11.7	70
96	Catalytic production of hydrogen peroxide and water by oxygen-tolerant [NiFe]-hydrogenase during H <sub>2</sub> cycling in the presence of O <sub>2</sub> . <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 17897-905	16.4	67
95	Double-flow focused liquid injector for efficient serial femtosecond crystallography. <i>Scientific Reports</i> , <b>2017</b> , 7, 44628	4.9	62
94	NAD(H)-coupled hydrogen cycling - structure-function relationships of bidirectional [NiFe] hydrogenases. <i>FEBS Letters</i> , <b>2012</b> , 586, 545-56	3.8	60
93	Probing the active site of an O <sub>2</sub> -tolerant NAD <sup>+</sup> -reducing [NiFe]-hydrogenase from <i>Ralstonia eutropha</i> H16 by in situ EPR and FTIR spectroscopy. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 8026-9	16.4	60
92	Novel, oxygen-insensitive group 5 [NiFe]-hydrogenase in <i>Ralstonia eutropha</i> . <i>Applied and Environmental Microbiology</i> , <b>2013</b> , 79, 5137-45	4.8	58
91	H <sub>2</sub> -driven cofactor regeneration with NAD(P) <sup>+</sup> -reducing hydrogenases. <i>FEBS Journal</i> , <b>2013</b> , 280, 3058-68	5.7	54
90	Characterization of the active site of a hydrogen sensor from <i>Alcaligenes eutrophus</i> . <i>FEBS Letters</i> , <b>1998</b> , 438, 231-5	3.8	53
89	Chaperones specific for the membrane-bound [NiFe]-hydrogenase interact with the Tat signal peptide of the small subunit precursor in <i>Ralstonia eutropha</i> H16. <i>Molecular Microbiology</i> , <b>2007</b> , 66, 453-67	4.1	53
88	Enzymatic oxidation of H <sub>2</sub> in atmospheric O <sub>2</sub> : the electrochemistry of energy generation from trace H <sub>2</sub> by aerobic microorganisms. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 424-5	16.4	52
87	Requirements for heterologous production of a complex metalloenzyme: the membrane-bound [NiFe] hydrogenase. <i>Journal of Bacteriology</i> , <b>2005</b> , 187, 6590-5	3.5	52
86	Resonance Raman spectroscopy on [NiFe] hydrogenase provides structural insights into catalytic intermediates and reactions. <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 9870-3	16.4	51
85	Carbamoylphosphate serves as the source of CN(-), but not of the intrinsic CO in the active site of the regulatory [NiFe]-hydrogenase from <i>Ralstonia eutropha</i> . <i>FEBS Letters</i> , <b>2007</b> , 581, 3322-6	3.8	50
84	The H <sub>2</sub> -sensing complex of <i>Ralstonia eutropha</i> : interaction between a regulatory [NiFe] hydrogenase and a histidine protein kinase. <i>Molecular Microbiology</i> , <b>2004</b> , 51, 1677-89	4.1	50

83	A proteomic view of the facultatively chemolithoautotrophic lifestyle of <i>Ralstonia eutropha</i> H16. <i>Proteomics</i> , <b>2009</b> , 9, 5132-42	4.8	49
82	A hydrogen-sensing system in transcriptional regulation of hydrogenase gene expression in <i>Alcaligenes</i> species. <i>Journal of Bacteriology</i> , <b>1997</b> , 179, 1655-63	3.5	48
81	NiFe hydrogenase active site biosynthesis: identification of Hyp protein complexes in <i>Ralstonia eutropha</i> . <i>Biochemistry</i> , <b>2004</b> , 43, 13467-77	3.2	47
80	Resonance Raman spectroscopy as a tool to monitor the active site of hydrogenases. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 5162-5	16.4	46
79	The Hydrogenase Subcomplex of the NAD <sup>+</sup> -Reducing [NiFe] Hydrogenase from <i>Ralstonia eutropha</i> Insights into Catalysis and Redox Interconversions. <i>European Journal of Inorganic Chemistry</i> , <b>2011</b> , 2011, 1067-1079	2.3	45
78	A modular system for regeneration of NAD cofactors using graphite particles modified with hydrogenase and diaphorase moieties. <i>Chemical Communications</i> , <b>2012</b> , 48, 1589-91	5.8	42
77	Concerted action of two novel auxiliary proteins in assembly of the active site in a membrane-bound [NiFe] hydrogenase. <i>Journal of Biological Chemistry</i> , <b>2009</b> , 284, 2159-68	5.4	40
76	A universal scaffold for synthesis of the Fe(CN) <sub>2</sub> (CO) moiety of [NiFe] hydrogenase. <i>Journal of Biological Chemistry</i> , <b>2012</b> , 287, 38845-53	5.4	40
75	Reduction of unusual iron-sulfur clusters in the H <sub>2</sub> -sensing regulatory Ni-Fe hydrogenase from <i>Ralstonia eutropha</i> H16. <i>Journal of Biological Chemistry</i> , <b>2005</b> , 280, 19488-95	5.4	40
74	A trimeric supercomplex of the oxygen-tolerant membrane-bound [NiFe]-hydrogenase from <i>Ralstonia eutropha</i> H16. <i>Biochemistry</i> , <b>2011</b> , 50, 10836-43	3.2	39
73	The hydrogen-sensing apparatus in <i>Ralstonia eutropha</i> . <i>Journal of Molecular Microbiology and Biotechnology</i> , <b>2002</b> , 4, 255-62	0.9	37
72	Enhanced oxygen-tolerance of the full heterotrimeric membrane-bound [NiFe]-hydrogenase of <i>Ralstonia eutropha</i> . <i>Journal of the American Chemical Society</i> , <b>2014</b> , 136, 8512-5	16.4	36
71	Catalytic properties of the isolated diaphorase fragment of the NAD-reducing [NiFe]-hydrogenase from <i>Ralstonia eutropha</i> . <i>PLoS ONE</i> , <b>2011</b> , 6, e25939	3.7	36
70	A model system for [NiFe] hydrogenase maturation studies: Purification of an active site-containing hydrogenase large subunit without small subunit. <i>FEBS Letters</i> , <b>2005</b> , 579, 4292-6	3.8	36
69	Asymmetric Biocatalytic Amination of Ketones at the Expense of NH <sub>3</sub> and Molecular Hydrogen. <i>Organic Letters</i> , <b>2015</b> , 17, 2431-3	6.2	34
68	Enzyme-Modified Particles for Selective Biocatalytic Hydrogenation by Hydrogen-Driven NADH Recycling. <i>ChemCatChem</i> , <b>2015</b> , 7, 3480-3487	5.2	34
67	Requirements for construction of a functional hybrid complex of photosystem I and [NiFe]-hydrogenase. <i>Applied and Environmental Microbiology</i> , <b>2010</b> , 76, 2641-51	4.8	34
66	Enzymes as modular catalysts for redox half-reactions in H <sub>2</sub> -powered chemical synthesis: from biology to technology. <i>Biochemical Journal</i> , <b>2017</b> , 474, 215-230	3.8	33

65	[NiFe] and [FeS] cofactors in the membrane-bound hydrogenase of <i>Ralstonia eutropha</i> investigated by X-ray absorption spectroscopy: insights into O <sub>2</sub> -tolerant H <sub>2</sub> cleavage. <i>Biochemistry</i> , <b>2011</b> , 50, 5858-5869	3.2	33
64	Monitoring catalysis of the membrane-bound hydrogenase from <i>Ralstonia eutropha</i> H16 by surface-enhanced IR absorption spectroscopy. <i>Angewandte Chemie - International Edition</i> , <b>2009</b> , 48, 611-613	16.4	33
63	Multilayered Lipid Membrane Stacks for Biocatalysis Using Membrane Enzymes. <i>Advanced Functional Materials</i> , <b>2017</b> , 27, 1606265	15.6	31
62	A hydrogen-sensing multiprotein complex controls aerobic hydrogen metabolism in <i>Ralstonia eutropha</i> . <i>Biochemical Society Transactions</i> , <b>2005</b> , 33, 97-101	5.1	31
61	Krypton Derivatization of an O <sub>2</sub> -Tolerant Membrane-Bound [NiFe] Hydrogenase Reveals a Hydrophobic Tunnel Network for Gas Transport. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 5586-90	16.4	31
60	Structure of an Actinobacterial-Type [NiFe]-Hydrogenase Reveals Insight into O <sub>2</sub> -Tolerant H <sub>2</sub> Oxidation. <i>Structure</i> , <b>2016</b> , 24, 285-92	5.2	30
59	Cofactor composition and function of a H <sub>2</sub> -sensing regulatory hydrogenase as revealed by Mössbauer and EPR spectroscopy. <i>Chemical Science</i> , <b>2015</b> , 6, 4495-4507	9.4	30
58	Reversible active site sulfoxxygenation can explain the oxygen tolerance of a NAD <sup>+</sup> -reducing [NiFe] hydrogenase and its unusual infrared spectroscopic properties. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 2555-64	16.4	30
57	Tracking the route of molecular oxygen in O <sub>2</sub> -tolerant membrane-bound [NiFe] hydrogenase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2018</b> , 115, E2229-E2237	11.5	29
56	Attenuated total reflectance infrared spectroelectrochemistry at a carbon particle electrode; unmediated redox control of a [NiFe]-hydrogenase solution. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 7055-9	3.6	29
55	Systematic evaluation of the dihydrogen-oxidising and NAD <sup>+</sup> -reducing soluble [NiFe]-hydrogenase from <i>Ralstonia eutropha</i> H16 as a cofactor regeneration catalyst. <i>Biocatalysis and Biotransformation</i> , <b>2011</b> , 29, 246-252	2.5	29
54	Bringing biocatalytic deuteration into the toolbox of asymmetric isotopic labelling techniques. <i>Nature Communications</i> , <b>2020</b> , 11, 1454	17.4	28
53	The maturation factors HoxR and HoxT contribute to oxygen tolerance of membrane-bound [NiFe] hydrogenase in <i>Ralstonia eutropha</i> H16. <i>Journal of Bacteriology</i> , <b>2011</b> , 193, 2487-97	3.5	26
52	Probing the origin of the metabolic precursor of the CO ligand in the catalytic center of [NiFe] hydrogenase. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 44937-44	5.4	26
51	Resonance Raman Spectroscopic Analysis of the [NiFe] Active Site and the Proximal [4Fe-3S] Cluster of an O <sub>2</sub> -Tolerant Membrane-Bound Hydrogenase in the Crystalline State. <i>Journal of Physical Chemistry B</i> , <b>2015</b> , 119, 13785-96	3.4	25
50	Nuclear resonance vibrational spectroscopy reveals the FeS cluster composition and active site vibrational properties of an O <sub>2</sub> -tolerant NAD-reducing [NiFe] hydrogenase. <i>Chemical Science</i> , <b>2015</b> , 6, 1055-1060	9.4	25
49	Electrochemical and Infrared Spectroscopic Studies Provide Insight into Reactions of the NiFe Regulatory Hydrogenase from <i>Ralstonia eutropha</i> with O <sub>2</sub> and CO. <i>Journal of Physical Chemistry B</i> , <b>2015</b> , 119, 13807-15	3.4	24
48	Comparison of the membrane-bound [NiFe] hydrogenases from <i>R. eutropha</i> H16 and <i>D. vulgaris</i> Miyazaki F in the oxidized ready state by pulsed EPR. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 2139-2148	3.6	24

47	Orientation-Controlled Electrocatalytic Efficiency of an Adsorbed Oxygen-Tolerant Hydrogenase. <i>PLoS ONE</i> , <b>2015</b> , 10, e0143101	3.7	22
46	Impact of alterations near the [NiFe] active site on the function of the H(2) sensor from <i>Ralstonia eutropha</i> . <i>FEBS Journal</i> , <b>2007</b> , 274, 74-85	5.7	20
45	CO synthesized from the central one-carbon pool as source for the iron carbonyl in O <sub>2</sub> -tolerant [NiFe]-hydrogenase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 14722-14726	11.5	20
44	Understanding the structure and dynamics of hydrogenases by ultrafast and two-dimensional infrared spectroscopy. <i>Chemical Science</i> , <b>2019</b> , 10, 8981-8989	9.4	19
43	Impact of Carbon Nanotube Surface Chemistry on Hydrogen Oxidation by Membrane-Bound Oxygen-Tolerant Hydrogenases. <i>ChemElectroChem</i> , <b>2016</b> , 3, 2179-2188	4.3	18
42	H <sub>2</sub> -driven biotransformation of n-octane to 1-octanol by a recombinant <i>Pseudomonas putida</i> strain co-synthesizing an O <sub>2</sub> -tolerant hydrogenase and a P450 monooxygenase. <i>Chemical Communications</i> , <b>2015</b> , 51, 16173-5	5.8	17
41	Stabilisation of the NAD <sup>+</sup> -reducing soluble [NiFe]-hydrogenase from <i>Ralstonia eutropha</i> H16 through modification with methoxy-poly(ethylene) glycol. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2012</b> , 74, 219-223		17
40	Contribution of a sodium ion gradient to energy conservation during fermentation in the cyanobacterium <i>Arthrospira (Spirulina) maxima</i> CS-328. <i>Applied and Environmental Microbiology</i> , <b>2011</b> , 77, 7185-94	4.8	17
39	In Situ Spectroelectrochemical Studies into the Formation and Stability of Robust Diazonium-Derived Interfaces on Gold Electrodes for the Immobilization of an Oxygen-Tolerant Hydrogenase. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 23380-23391	9.5	17
38	Reactivation from the Ni-B state in [NiFe] hydrogenase of <i>Ralstonia eutropha</i> is controlled by reduction of the superoxidised proximal cluster. <i>Chemical Communications</i> , <b>2016</b> , 52, 2632-5	5.8	15
37	Essential role of the hprK gene in <i>Ralstonia eutropha</i> H16. <i>Journal of Molecular Microbiology and Biotechnology</i> , <b>2009</b> , 17, 146-52	0.9	15
36	Phosphoglycolate salvage in a chemolithoautotroph using the Calvin cycle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2020</b> , 117, 22452-22461	11.5	15
35	Structural differences of oxidized iron-sulfur and nickel-iron cofactors in O <sub>2</sub> -tolerant and O <sub>2</sub> -sensitive hydrogenases studied by X-ray absorption spectroscopy. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2015</b> , 1847, 162-170	4.6	13
34	The large subunit of the regulatory [NiFe]-hydrogenase from - a minimal hydrogenase?. <i>Chemical Science</i> , <b>2020</b> , 11, 5453-5465	9.4	13
33	Impact of the iron-sulfur cluster proximal to the active site on the catalytic function of an O <sub>2</sub> -tolerant NAD(+) -reducing [NiFe]-hydrogenase. <i>Biochemistry</i> , <b>2015</b> , 54, 389-403	3.2	13
32	O-tolerant [NiFe]-hydrogenases of <i>Ralstonia eutropha</i> H16: Physiology, molecular biology, purification, and biochemical analysis. <i>Methods in Enzymology</i> , <b>2018</b> , 613, 117-151	1.7	13
31	Resonanz-Raman-Spektroskopie als Methode zur Untersuchung des aktiven Zentrums von Hydrogenasen. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 5267-5270	3.6	12
30	Formyltetrahydrofolate Decarbonylase Synthesizes the Active Site CO Ligand of O-Tolerant [NiFe] Hydrogenase. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 1457-1464	16.4	12

29	How to make the reducing power of H available for in vivo biosyntheses and biotransformations. <i>Current Opinion in Chemical Biology</i> , <b>2019</b> , 49, 91-96	9.7	12
28	4 Oxygen-tolerant hydrogenases and their biotechnological potential		11
27	Enzymatic and spectroscopic properties of a thermostable [NiFe]-hydrogenase performing H-driven NAD-reduction in the presence of O. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2018</b> , 1859, 8-18	4.6	11
26	O-Tolerant H Activation by an Isolated Large Subunit of a [NiFe] Hydrogenase. <i>Biochemistry</i> , <b>2018</b> , 57, 5339-5349	3.2	11
25	Stability enhancement of an O <sub>2</sub> -tolerant NAD <sup>+</sup> -reducing [NiFe]-hydrogenase by a combination of immobilisation and chemical modification. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2013</b> , 97, 169-174		11
24	Investigation of the NADH/NAD ratio in <i>Ralstonia eutropha</i> using the fluorescence reporter protein Peredox. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2017</b> , 1858, 86-94	4.6	11
23	Untersuchung des katalytischen Zentrums der O <sub>2</sub> -toleranten NAD <sup>+</sup> -reduzierenden [NiFe]-Hydrogenase von <i>Ralstonia eutropha</i> H16 mit In-situ-EPR- und -FTIR-Spektroskopie. <i>Angewandte Chemie</i> , <b>2010</b> , 122, 8200-8203	3.6	11
22	Impact of amino acid substitutions near the catalytic site on the spectral properties of an O <sub>2</sub> -tolerant membrane-bound [NiFe] hydrogenase. <i>ChemPhysChem</i> , <b>2010</b> , 11, 1215-24	3.2	10
21	Protein-protein complex formation affects the Ni-Fe and Fe-S centers in the H <sub>2</sub> -sensing regulatory hydrogenase from <i>Ralstonia eutropha</i> H16. <i>ChemPhysChem</i> , <b>2010</b> , 11, 1297-306	3.2	10
20	Exploring Structure and Function of Redox Intermediates in [NiFe]-Hydrogenases by an Advanced Experimental Approach for Solvated, Lyophilized and Crystallized Metalloenzymes. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 15854-15862	16.4	10
19	Untersuchung des Katalyseprozesses der membrangebundenen Hydrogenase aus <i>Ralstonia eutropha</i> H16 mittels oberflächenverstärkter IR-Absorptionsspektroskopie. <i>Angewandte Chemie</i> , <b>2009</b> , 121, 621-623	3.6	8
18	Hydrogen Oxidation by <i>Alcaligenes</i> <b>1996</b> , 110-117		7
17	Assembly as a Tool to Investigate Catalytic Intermediates of [NiFe]-Hydrogenase. <i>ACS Catalysis</i> , <b>2020</b> , 10, 13890-13894	13.1	7
16	Heterologous Hydrogenase Overproduction Systems for Biotechnology-An Overview. <i>International Journal of Molecular Sciences</i> , <b>2020</b> , 21,	6.3	7
15	Hydroxy-bridged resting states of a [NiFe]-hydrogenase unraveled by cryogenic vibrational spectroscopy and DFT computations. <i>Chemical Science</i> , <b>2020</b> , 12, 2189-2197	9.4	7
14	Dihydrogen-Driven NADPH Recycling in Imine Reduction and P450-Catalyzed Oxidations Mediated by an Engineered O <sub>2</sub> -Tolerant Hydrogenase. <i>ChemCatChem</i> , <b>2020</b> , 12, 4853-4861	5.2	6
13	Rubredoxin-related maturation factor guarantees metal cofactor integrity during aerobic biosynthesis of membrane-bound [NiFe] hydrogenase. <i>Journal of Biological Chemistry</i> , <b>2014</b> , 289, 7982-7993	5.4	6
12	A membrane-bound [NiFe]-hydrogenase large subunit precursor whose C-terminal extension is not essential for cofactor incorporation but guarantees optimal maturation. <i>MicrobiologyOpen</i> , <b>2020</b> , 9, 1197-1206	5.5	6

11	Active Site of the NAD(+)-Reducing Hydrogenase from <i>Ralstonia eutropha</i> Studied by EPR Spectroscopy. <i>Journal of Physical Chemistry B</i> , <b>2015</b> , 119, 13834-41	3-4	4
10	Discriminating changes in intracellular NADH/NAD levels due to anoxicity and H supply in <i>R. eutropha</i> cells using the Frex Fluorescence sensor. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , <b>2019</b> , 1860, 148062	4.6	4
9	Ein Netzwerk aus hydrophoben Tunneln zum Transport gasförmiger Reaktanten in einer O <sub>2</sub> -toleranten, membrangebundenen [NiFe]- Hydrogenase, aufgedeckt durch Derivatisierung mit Krypton. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 5676-5680	3.6	4
8	Growth of the facultative chemolithoautotroph <i>Ralstonia eutropha</i> on organic waste materials: growth characteristics, redox regulation and hydrogenase activity. <i>Microbial Cell Factories</i> , <b>2019</b> , 18, 2016-4	6.4	4
7	Characterization of Frex as an NADH sensor for in vivo applications in the presence of NAD and at various pH values. <i>Photosynthesis Research</i> , <b>2017</b> , 133, 305-315	3-7	3
6	Optimization of Culture Conditions for Oxygen-Tolerant Regulatory [NiFe]-Hydrogenase Production from H16 in. <i>Microorganisms</i> , <b>2021</b> , 9,	4-9	3
5	Resonance Raman spectroscopic analysis of the iron-sulfur cluster redox chain of the <i>Ralstonia eutropha</i> membrane-bound [NiFe]-hydrogenase. <i>Journal of Raman Spectroscopy</i> ,	2-3	2
4	Photorespiration pathways in a chemolithoautotroph		1
3	Electrografted Interfaces on Metal Oxide Electrodes for Enzyme Immobilization and Bioelectrocatalysis. <i>ChemElectroChem</i> , <b>2021</b> , 8, 1329-1336	4-3	0
2	High-Yield Production of Catalytically Active Regulatory [NiFe]-Hydrogenase From in .. <i>Frontiers in Microbiology</i> , <b>2022</b> , 13, 894375	5-7	0
1	Ein neuer Aufbau zur Untersuchung der Struktur und Funktion von solvatisierten, lyophilisierten und kristallinen Metalloenzymen veranschaulicht anhand von [NiFe]-Hydrogenasen. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 15988-15996	3.6	