

# Chi Chung Lee

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/4917072/chi-chung-lee-publications-by-citations.pdf>  
**Version:** 2024-04-10

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.  
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

55 papers	1,632 citations	20 h-index	39 g-index
59 ext. papers	2,045 ext. citations	13.5 avg, IF	5.12 L-index

#	Paper	IF	Citations
55	Radical SAM-dependent carbon insertion into the nitrogenase M-cluster. <i>Science</i> , <b>2012</b> , 337, 1672-5	33.3	212
54	Vanadium nitrogenase reduces CO. <i>Science</i> , <b>2010</b> , 329, 642	33.3	204
53	Extending the carbon chain: hydrocarbon formation catalyzed by vanadium/molybdenum nitrogenases. <i>Science</i> , <b>2011</b> , 333, 753-5	33.3	187
52	Unique features of the nitrogenase VFe protein from <i>Azotobacter vinelandii</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 9209-14	11.5	101
51	Structural evidence for a dynamic metallocofactor during N reduction by Mo-nitrogenase. <i>Science</i> , <b>2020</b> , 368, 1381-1385	33.3	57
50	Reactivity, Mechanism, and Assembly of the Alternative Nitrogenases. <i>Chemical Reviews</i> , <b>2020</b> , 120, 5107-5156	65.1	56
49	ATP-independent formation of hydrocarbons catalyzed by isolated nitrogenase cofactors. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 1947-9	16.4	54
48	Catalytic reduction of CN <sup>-</sup> , CO, and CO <sub>2</sub> by nitrogenase cofactors in lanthanide-driven reactions. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 1219-22	16.4	48
47	Identification and characterization of functional homologs of nitrogenase cofactor biosynthesis protein NifB from methanogens. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 14829-33	11.5	45
46	Stepwise formation of P-cluster in nitrogenase MoFe protein. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2009</b> , 106, 18474-8	11.5	43
45	Tracing the X <sup>th</sup> sulfur of the nitrogenase cofactor via a semi-synthetic approach. <i>Nature Chemistry</i> , <b>2018</b> , 10, 568-572	17.6	41
44	Tracing the hydrogen source of hydrocarbons formed by vanadium nitrogenase. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 5545-7	16.4	40
43	Activation and reduction of carbon dioxide by nitrogenase iron proteins. <i>Nature Chemical Biology</i> , <b>2017</b> , 13, 147-149	11.7	35
42	Uncoupling binding of substrate CO from turnover by vanadium nitrogenase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 13845-9	11.5	34
41	Structure and Reactivity of an Asymmetric Synthetic Mimic of Nitrogenase Cofactor. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 15633-15636	16.4	33
40	Probing the coordination and function of FeS modules in nitrogenase assembly protein NifB. <i>Nature Communications</i> , <b>2018</b> , 9, 2824	17.4	29
39	Ambient conversion of CO <sub>2</sub> to hydrocarbons by biogenic and synthetic [Fe <sub>4</sub> S <sub>4</sub> ] clusters. <i>Nature Catalysis</i> , <b>2018</b> , 1, 444-451	36.5	29

38	Combining a Nitrogenase Scaffold and a Synthetic Compound into an Artificial Enzyme. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 14022-5	16.4	28
37	Reduction of C Substrates to Hydrocarbons by the Homometallic Precursor and Synthetic Mimic of the Nitrogenase Cofactor. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 603-606	16.4	23
36	The in vivo hydrocarbon formation by vanadium nitrogenase follows a secondary metabolic pathway. <i>Nature Communications</i> , <b>2016</b> , 7, 13641	17.4	22
35	Cluster assembly in nitrogenase. <i>Essays in Biochemistry</i> , <b>2017</b> , 61, 271-279	7.6	18
34	ATP-independent substrate reduction by nitrogenase P-cluster variant. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 6922-6	11.5	18
33	Tuning Electron Flux through Nitrogenase with Methanogen Iron Protein Homologues. <i>Chemistry - A European Journal</i> , <b>2017</b> , 23, 16152-16156	4.8	18
32	Assembly scaffold NifEN: A structural and functional homolog of the nitrogenase catalytic component. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2016</b> , 113, 9504-8	11.5	17
31	Catalytic Reduction of CN <sup>-</sup> , CO, and CO <sub>2</sub> by Nitrogenase Cofactors in Lanthanide-Driven Reactions. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 1235-1238	3.6	17
30	Evaluation of the Catalytic Relevance of the CO-Bound States of V-Nitrogenase. <i>Angewandte Chemie - International Edition</i> , <b>2018</b> , 57, 3411-3414	16.4	16
29	Insights into hydrocarbon formation by nitrogenase cofactor homologs. <i>MBio</i> , <b>2015</b> , 6,	7.8	16
28	A Comparative Analysis of the CO-Reducing Activities of MoFe Proteins Containing Mo- and V-Nitrogenase Cofactors. <i>ChemBioChem</i> , <b>2018</b> , 19, 649-653	3.8	15
27	ATP-Independent Formation of Hydrocarbons Catalyzed by Isolated Nitrogenase Cofactors. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 1983-1985	3.6	15
26	Characterization of an M-Cluster-Substituted Nitrogenase VFe Protein. <i>MBio</i> , <b>2018</b> , 9,	7.8	12
25	X-Ray Crystallographic Analysis of NifB with a Full Complement of Clusters: Structural Insights into the Radical SAM-Dependent Carbide Insertion During Nitrogenase Cofactor Assembly. <i>Angewandte Chemie - International Edition</i> , <b>2021</b> , 60, 2364-2370	16.4	12
24	Cleaving the n,n triple bond: the transformation of dinitrogen to ammonia by nitrogenases. <i>Metals in Life Sciences</i> , <b>2014</b> , 14, 147-76	2.6	11
23	Reduction and Condensation of Aldehydes by the Isolated Cofactor of Nitrogenase. <i>ACS Central Science</i> , <b>2018</b> , 4, 1430-1435	16.8	11
22	Spectroscopic Characterization of the Isolated Iron-Molybdenum Cofactor (FeMoco) Precursor from the Protein NifEN. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 7933-7936	3.6	10
21	Structure and Reactivity of an Asymmetric Synthetic Mimic of Nitrogenase Cofactor. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 15862-15865	3.6	10

20	Identity and function of an essential nitrogen ligand of the nitrogenase cofactor biosynthesis protein NifB. <i>Nature Communications</i> , <b>2020</b> , 11, 1757	17.4	10
19	A VTVH MCD and EPR Spectroscopic Study of the Maturation of the "Second" Nitrogenase P-Cluster. <i>Inorganic Chemistry</i> , <b>2018</b> , 57, 4719-4725	5.1	9
18	Combining a Nitrogenase Scaffold and a Synthetic Compound into an Artificial Enzyme. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 14228-14231	3.6	9
17	Strategies Towards Capturing Nitrogenase Substrates and Intermediates via Controlled Alteration of Electron Fluxes. <i>Chemistry - A European Journal</i> , <b>2019</b> , 25, 2389-2395	4.8	8
16	Tracing the Hydrogen Source of Hydrocarbons Formed by Vanadium Nitrogenase. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 5659-5661	3.6	7
15	Response to Comment on "Structural evidence for a dynamic metallocofactor during N reduction by Mo-nitrogenase". <i>Science</i> , <b>2021</b> , 371,	33.3	7
14	Reactivity of [FeS] Clusters toward C1 Substrates: Mechanism, Implications, and Potential Applications. <i>Accounts of Chemical Research</i> , <b>2019</b> , 52, 1168-1176	24.3	6
13	Heterologous Expression and Engineering of the Nitrogenase Cofactor Biosynthesis Scaffold NifEN. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 6887-6893	16.4	6
12	Evaluation of the Catalytic Relevance of the CO-Bound States of V-Nitrogenase. <i>Angewandte Chemie</i> , <b>2018</b> , 130, 3469-3472	3.6	5
11	Structural Analysis of a Nitrogenase Iron Protein from Methanosarcina acetivorans: Implications for CO Capture by a Surface-Exposed [FeS] Cluster. <i>MBio</i> , <b>2019</b> , 10,	7.8	5
10	A V-Nitrogenase Variant Containing a Citrate-Substituted Cofactor. <i>ChemBioChem</i> , <b>2020</b> , 21, 1742-1748	3.8	5
9	Electrochemical Characterization of Isolated Nitrogenase Cofactors from Azotobacter vinelandii. <i>ChemBioChem</i> , <b>2020</b> , 21, 1773-1778	3.8	5
8	Structures and Functions of the Active Sites of Nitrogenases		4
7	Structural and Mechanistic Insights into CO Activation by Nitrogenase Iron Protein. <i>Chemistry - A European Journal</i> , <b>2019</b> , 25, 13078-13082	4.8	2
6	Probing the All-Ferrous States of Methanogen Nitrogenase Iron Proteins. <i>Jacs Au</i> , <b>2021</b> , 1, 119-123		2
5	X-Ray Crystallographic Analysis of NifB with a Full Complement of Clusters: Structural Insights into the Radical SAM-Dependent Carbide Insertion During Nitrogenase Cofactor Assembly. <i>Angewandte Chemie</i> , <b>2021</b> , 133, 2394-2400	3.6	2
4	Characterization of a Mo-Nitrogenase Variant Containing a Citrate-Substituted Cofactor. <i>ChemBioChem</i> , <b>2021</b> , 22, 151-155	3.8	1
3	Tracing the incorporation of the "ninth sulfur" into the nitrogenase cofactor precursor with selenite and tellurite. <i>Nature Chemistry</i> , <b>2021</b> , 13, 1228-1234	17.6	0

- 2 Heterologous Expression and Engineering of the Nitrogenase Cofactor Biosynthesis Scaffold NifEN. *Angewandte Chemie*, **2020**, 132, 6954-6960 3.6
- 1 Radical SAM-dependent formation of a nitrogenase cofactor core on NifB.. *Journal of Inorganic Biochemistry*, **2022**, 233, 111837 4.2