

Hiromasa Tanaka

List of Publications by Year in descending order

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Version: 2024-02-01

42
papers

2,890
citations

279798

23
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254184

43
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43
all docs

43
docs citations

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times ranked

1564
citing authors

#	ARTICLE	IF	CITATIONS
1	Catalytic transformation of dinitrogen into ammonia and hydrazine by iron-dinitrogen complexes bearing pincer ligand. <i>Nature Communications</i> , 2016, 7, 12181.	12.8	244
2	Catalytic Reduction of Dinitrogen to Ammonia by Use of Molybdenum Nitride Complexes Bearing a Tridentate Triphosphine as Catalysts. <i>Journal of the American Chemical Society</i> , 2015, 137, 5666-5669.	13.7	215
3	Catalytic Formation of Ammonia from Molecular Dinitrogen by Use of Dinitrogen-Bridged Dimolybdenum Dinitrogen Complexes Bearing PNP-Pincer Ligands: Remarkable Effect of Substituent at PNP-Pincer Ligand. <i>Journal of the American Chemical Society</i> , 2014, 136, 9719-9731.	13.7	202
4	Interplay between Theory and Experiment for Ammonia Synthesis Catalyzed by Transition Metal Complexes. <i>Accounts of Chemical Research</i> , 2016, 49, 987-995.	15.6	200
5	Remarkable catalytic activity of dinitrogen-bridged dimolybdenum complexes bearing NHC-based PCP-pincer ligands toward nitrogen fixation. <i>Nature Communications</i> , 2017, 8, 14874.	12.8	198
6	Direct Transformation of Molecular Dinitrogen into Ammonia Catalyzed by Cobalt Dinitrogen Complexes Bearing Anionic PNP Pincer Ligands. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 14291-14295.	13.8	184
7	Unique behaviour of dinitrogen-bridged dimolybdenum complexes bearing pincer ligand towards catalytic formation of ammonia. <i>Nature Communications</i> , 2014, 5, 3737.	12.8	162
8	Catalytic Nitrogen Fixation via Direct Cleavage of Nitrogen Nitrogen Triple Bond of Molecular Dinitrogen under Ambient Reaction Conditions. <i>Bulletin of the Chemical Society of Japan</i> , 2017, 90, 1111-1118.	3.2	156
9	Molybdenum-Catalyzed Transformation of Molecular Dinitrogen into Silylamine: Experimental and DFT Study on the Remarkable Role of Ferrocenyldiphosphine Ligands. <i>Journal of the American Chemical Society</i> , 2011, 133, 3498-3506.	13.7	148
10	Iron-catalysed transformation of molecular dinitrogen into silylamine under ambient conditions. <i>Nature Communications</i> , 2012, 3, 1254.	12.8	118
11	Cleavage and Formation of Molecular Dinitrogen in a Single System Assisted by Molybdenum Complexes Bearing Ferrocenyldiphosphine. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 11488-11492.	13.8	111
12	Catalytic Reduction of Molecular Dinitrogen to Ammonia and Hydrazine Using Vanadium Complexes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 9064-9068.	13.8	109
13	Nitrogen fixation catalyzed by ferrocene-substituted dinitrogen-bridged dimolybdenum dinitrogen complexes: unique behavior of ferrocene moiety as redox active site. <i>Chemical Science</i> , 2015, 6, 3940-3951.	7.4	100
14	Cobalt-Catalyzed Transformation of Molecular Dinitrogen into Silylamine under Ambient Reaction Conditions. <i>Chemistry - A European Journal</i> , 2015, 21, 8905-8909.	3.3	80
15	Direct Transformation of Molecular Dinitrogen into Ammonia Catalyzed by Cobalt Dinitrogen Complexes Bearing Anionic PNP Pincer Ligands. <i>Angewandte Chemie</i> , 2016, 128, 14503-14507.	2.0	56
16	DFT Study on Chemical N ₂ Fixation by Using a Cubane-Type Ru ₃ S ₄ Cluster: Energy Profile for Binding and Reduction of N ₂ to Ammonia via Ru ^{III} NH ₂ (λ^3) Intermediates with Unique Structures. <i>Journal of the American Chemical Society</i> , 2008, 130, 9037-9047.	13.7	49
17	Molybdenum-Catalyzed Ammonia Formation Using Simple Monodentate and Bidentate Phosphines as Auxiliary Ligands. <i>Inorganic Chemistry</i> , 2019, 58, 8927-8932.	4.0	48
18	Molecular understanding of the adhesive interactions between silica surface and epoxy resin: Effects of interfacial water. <i>Journal of Computational Chemistry</i> , 2019, 40, 164-171.	3.3	45

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19	Azaferrocene-Based PNP-Type Pincer Ligand: Synthesis of Molybdenum, Chromium, and Iron Complexes and Reactivity toward Nitrogen Fixation. <i>European Journal of Inorganic Chemistry</i> , 2016, 2016, 4856-4861.	2.0	39
20	DFT Study on N ₂ Activation by a Hydride-Bridged Diniobium Complex. N≡N Bond Cleavage Accompanied by H ₂ Evolution. <i>Inorganic Chemistry</i> , 2009, 48, 3875-3881.	4.0	29
21	Density-Functional Tight-Binding Study on the Effects of Interfacial Water in the Adhesion Force between Epoxy Resin and Alumina Surface. <i>Langmuir</i> , 2018, 34, 14428-14438.	3.5	27
22	Catalytic reduction of dinitrogen to tris(trimethylsilyl)amine using rhodium complexes with a pyrrole-based PNP-type pincer ligand. <i>Chemical Communications</i> , 2019, 55, 14886-14889.	4.1	26
23	A Square-Planar Complex of Platinum(0). <i>Angewandte Chemie - International Edition</i> , 2016, 55, 15347-15350.	13.8	25
24	Cycling between Molybdenum-Dinitrogen and Nitride Complexes to Support the Reaction Pathway for Catalytic Formation of Ammonia from Dinitrogen. <i>Chemistry - A European Journal</i> , 2020, 26, 13383-13389.	3.3	25
25	Catalytic Reactivity of Molybdenum-Trihalide Complexes Bearing PCP-Type Pincer Ligands. <i>Chemistry - an Asian Journal</i> , 2019, 14, 2091-2096.	3.3	24
26	Synergy of Electrostatic and van der Waals Interactions in the Adhesion of Epoxy Resin with Carbon-Fiber and Glass Surfaces. <i>Bulletin of the Chemical Society of Japan</i> , 2017, 90, 500-505.	3.2	22
27	Ammonia Formation Catalyzed by a Dinitrogen-Bridged Dirhenium Complex Bearing PNP-Pincer Ligands under Mild Reaction Conditions**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 13906-13912.	13.8	21
28	Nitrogen Fixation Catalyzed by Dinitrogen-Bridged Dimolybdenum Complexes Bearing PCP- and PNP-Type Pincer Ligands: A Shortcut Pathway Deduced from Free Energy Profiles. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 1490-1498.	2.0	17
29	Preparation and reactivity of molybdenum complexes bearing pyrrole-based PNP-type pincer ligand. <i>Chemical Communications</i> , 2020, 56, 6933-6936.	4.1	17
30	Theoretical Study on Activation and Protonation of Dinitrogen on Cubane-Type M ₃ S ₄ Clusters (M = V, Cr, Mn, Fe, Co, Ni, Cu, Mo, Ru, and W). <i>Inorganic Chemistry</i> , 2010, 49, 2464-2470.	4.0	13
31	Synthesis and Catalytic Reactivity of Bis(molybdenum-trihalide) Complexes Bridged by Ferrocene Skeleton toward Catalytic Nitrogen Fixation. <i>Organometallics</i> , 2019, 38, 2863-2872.	2.3	13
32	Catalytic Reduction of Dinitrogen into Ammonia and Hydrazine by Using Chromium Complexes Bearing PCP-Type Pincer Ligands**. <i>Chemistry - A European Journal</i> , 2022, 28, .	3.3	13
33	Catalytic Reduction of Dinitrogen to Ammonia and Hydrazine Using Iron-Dinitrogen Complexes Bearing Anionic Benzene-Based PCP-Type Pincer Ligands. <i>Bulletin of the Chemical Society of Japan</i> , 2022, 95, 683-692.	3.2	11
34	Iridium-catalyzed Formation of Silylamine from Dinitrogen under Ambient Reaction Conditions. <i>Chemistry Letters</i> , 2020, 49, 794-797.	1.3	9
35	Structural characterization of molybdenum-dinitrogen complex as key species toward ammonia formation by dispersive XAFS spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 12368-12372.	2.8	9
36	Mechanistic Study on Catalytic Disproportionation of Hydrazine by a Protic Pincer-Type Iron Complex through Proton-Coupled Electron Transfer. <i>European Journal of Inorganic Chemistry</i> , 2020, 2020, 1472-1482.	2.0	8

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37	Synthesis and Reactivity of Cobalt ^{II} -Dinitrogen Complexes Bearing Anionic PCP-Type Pincer Ligands toward Catalytic Silylamine Formation from Dinitrogen. <i>Inorganic Chemistry</i> , 2022, 61, 5190-5195.	4.0	8
38	A Square-Planar Complex of Platinum(0). <i>Angewandte Chemie</i> , 2016, 128, 15573-15576.	2.0	7
39	Hydroboration and Hydrosilylation of a Molybdenum-Nitride Complex Bearing a PNP-Type Pincer Ligand. <i>Organometallics</i> , 2022, 41, 366-373.	2.3	5
40	Synthesis and Structure of a Water-soluble μ - η^1 - η^1 -N ₂ Dinuclear Ru ^{II} Complex with a Polyamine Ligand. <i>Chemistry Letters</i> , 2016, 45, 149-151.	1.3	4
41	Ammonia Formation Catalyzed by a Dinitrogen-Bridged Dirhenium Complex Bearing PNP-Pincer Ligands under Mild Reaction Conditions**. <i>Angewandte Chemie</i> , 2021, 133, 14025-14031.	2.0	2
42	Theoretical Views on Catalytic Reaction Pathways for Nitrogen Fixation by Dinitrogen-Bridging Dimolybdenum Complexes. <i>Yuki Gosei Kagaku Kyokaiishi/Journal of Synthetic Organic Chemistry</i> , 2021, 79, 1041-1049.	0.1	1