

研究成果報告書 (掲載期間 2021.11.1－2022.10.31)

審査学術論文

- (1) Takayuki Itabashi, Kazuya Arashiba, Hiromasa Tanaka, Kazunari Yoshizawa, Yoshiaki Nishibayashi : Hydroboration and hydrosilylation of a molybdenum-nitride complex bearing PNP-type pincer ligand, *Organometallics*, 41, 2022, 4, pp.366–373.
- (2) Yuya Ashida, Akihito Egi, Kazuya Arashiba, Hiromasa Tanaka, Taichi. Mitsumoto, Shogo Kuriyama, Kazunari Yoshizawa, Yoshiaki Nishibayashi : Catalytic reduction of dinitrogen into ammonia and hydrazine using chromium complexes bearing PCP-type pincer ligand, *Chem. Eur. J.*, 28, 2022, 25, p.e202200557.
- (3) Shogo Kuriyama, Takeru Kato, Hiromasa Tanaka, Asuka Konomi, Kazunari Yoshizawa, Yoshiaki Nishibayashi : Catalytic reduction of dinitrogen to ammonia and hydrazine using iron-dinitrogen complexes bearing anionic benzene-based PCP-type pincer ligands, *Bull. Chem. Soc. Jpn.*, 95, 2022, 4, pp.683–692.
- (4) Shogo Kuriyama, Shenglan Wei, Hiromasa Tanaka, Asuka Konomi, Kazunari Yoshizawa, Yoshiaki Nishibayashi : Synthesis and reactivity of cobalt-dinitrogen complexes bearing anionic PCP-type pincer ligands toward catalytic silylamine formation from dinitrogen, *Inorg. Chem.*, 61, 2022, 13, pp.5190–5195.
- (5) Fanqiang Meng, Shogo Kuriyama, Akihito Egi, Hiromasa Tanaka, Kazunari Yoshizawa, Yoshiaki Nishibayashi : Preparation and reactivity of rhenium-nitride complexes bearing PNP-type pincer ligands toward nitrogen fixation, *Organometallics*, in press, 2022.
- (6) Takayuki Itabashi, Kazuya Arashiba, Akihito Egi, Hiromasa Tanaka, Keita Sugiyama, Shun Suginome, Shogo Kuriyama, Kazunari Yoshizawa, Yoshiaki Nishibayashi : Direct synthesis of cyanate anion from dinitrogen catalysed by molybdenum complexes bearing pincer ligand, *Nature Commun.*, 13, 2022, 1, p.6161.

受賞

- (1) 田中宏昌 : BCSJ Award Article, 論文「Catalytic reduction of dinitrogen to ammonia and hydrazine using iron-dinitrogen complexes bearing anionic benzene-based PCP-type pincer ligands」, 2022 年 8 月.