

## 研究成果報告書 (掲載期間 2024. 11. 1-2026. 3. 31)

### 審査学術論文

- (1) Taiji Nakamura, Yusuke Tsuruta, Akihito Egi, Hiromasa Tanaka, Yoshiaki Nishibayashi, Kazunari Yoshizawa: Theoretical study of imide formation in nitrogen fixation catalyzed by molybdenum complex bearing PCP-type pincer ligand with metallocenes, *Inorg. Chem.*, Vol.64, 2025, No.18, pp.9124-9136.
- (2) Taichi Mitsumoto, Taiji Nakamura, Hiromasa Tanaka, Kazunari Yoshizawa, Yoshiaki Nishibayashi: Cooperative ammonia formation catalyzed by molybdenum and samarium complexes, *Angew. Chem. Int. Ed.*, 2025, e202507061 (9 pages).
- (3) Shun Suginome, Atsushi Okochi, Taiji Nakamura, Asuka Konomi, Hiromasa Tanaka, Kazunari Yoshizawa, Yoshiaki Nishibayashi: Catalytic reduction of dinitrogen via hydroboration, *J. Am. Chem. Soc.*, Vol.147, 2025, No.30, pp.26684-26692.
- (4) Tomoyuki Miyazaki, Shun Suginome, Taiji Nakamura, Hiromasa Tanaka, Kazunari Yoshizawa, Yoshiaki Nishibayashi: Reactivity of a molybdenum-nitride complex bearing an NHC-based PCP-type pincer ligand toward unsaturated substrates, *Dalton Trans.*, Vol.54, 2025, No.42, pp.15864-15872.
- (5) Yoshikatsu Kameda, Shun Suginome, Taiji Nakamura, Hiromasa Tanaka, Kazunari Yoshizawa, Yoshiaki Nishibayashi: Catalytic nitrogen fixation using molybdenum-oxo complexes bearing NHC-based PCP-type pincer ligands via oxo-to-nitride conversion, *J. Am. Chem. Soc.*, Vol.148, 2026 No.8, pp.8884-8892.