

## 研究成 果 報 告 書 (掲載期間 2022.11.1 – 2023.10.31)

### 審査学術論文

- (1) Yuta Ashida, Yuto Onozuka, Kazuya Arashiba, Asuka Konomi, Hiromasa Tanaka, Shogo Kuriyama, Yasuomi Yamazaki, Kazunari Yoshizawa, Yoshiaki Nishibayashi : Catalytic nitrogen fixation using visible light energy, *Nature Communications*, 13 卷, 2022,, 7263 (8 pages).
- (2) Akira Yamamoto, Xueshi Liu, Kazuya Arashiba, Asuka Konomi, Hiromasa Tanaka, Kazunari Yoshizawa, Yoshiaki Nishibayashi, Hisao Yoshida : Coordination structure of samarium diiodide in a tetrahydrofuran-water mixture, *Inorganic Chemistry*, 62 卷, 2023, 14 号, pp.5348-5356.
- (3) Yuta Ashida, Takuro Mizushima, Kazuya Arashiba, Akihito Egi, Hiromasa Tanaka, Kazunari Yoshizawa, Yoshiaki Nishibayashi : Catalytic production of ammonia from dinitrogen employing molybdenum complexes bearing *N*-heterocyclic carbene-based PCP-type pincer ligands, *Nature Synthesis*, 2 卷, 2023,, pp.635-644.
- (4) Taichi Mitsumoto, Yuya Ashida, Kazuya Arashiba, Shogo Kuriyama, Akihito Egi, Hiromasa Tanaka, Kazunari Yoshizawa, Yoshiaki Nishibayashi : Catalytic activity of molybdenum complexes bearing PNP-type pincer ligand toward ammonia formation, *Angewandte Chemie Int. Ed.*, 62 卷, 2023, 43 号, e202306631 (8 pages).
- (5) Aya Eizawa, Kazuya Arashiba, Hiromasa Tanaka, Asuka Konomi, Kazunari Yoshizawa, Yoshiaki Nishibayashi : Design, synthesis and reactivity of dimolybdenum complex bearing quaterphenylene-bridged pyridine-based PNP-type pincer ligand, *Dalton Transactions*, 52 卷, 2023, 39 号, pp.14012-14016.