

フェナレニル骨格を配位子に有するゲルミレンの合成と物性

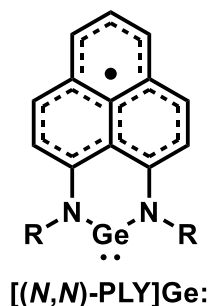
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Synthesis and Properties of Germylenes Bearing a Phenalenyl-Based Ligand (¹*Graduate School of Engineering, Osaka University*, ²*ICS-OTRI, Osaka University*, ³*School of Engineering Science, Osaka University*, ⁴*Graduate School of Engineering Science, Osaka University*, ⁵*QIQB, Osaka University*, ⁶*RCSEC, Osaka University*, ⁷*CSRN, Osaka University*)
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Main-group element complexes bearing open-shell ligands are expected to exhibit unique properties derived from their singly occupied molecular orbital (SOMO), unlike common closed-shell complexes. However, due to their high reactivity, isolable complexes are still limited, which hinders a detailed understanding of their fundamental properties as well as the development of practical applications. We report herein the synthesis and characterization of germylenes bearing a (*N,N*)-PLY ligand,¹ which is a π -extended analogue of a NacNac-type ligand.²

Keywords : Germylenes; Phenalenyl; π -Conjugated Compounds; Main-Group Elements; Open-Shell Ligands

ラジカル性配位子を有する典型元素錯体は、従来型錯体とは異なり半占軌道に由来した特異な性質を発現することが期待される。しかしながら、高い反応性ゆえの取り扱いの難しさからその合成例は限定的であり、電子状態解明の観点からも立ち遅れている。本研究では遷移金属錯体や典型元素錯体の配位子として汎用される NacNac 型配位子²の π 拡張体にあたる(*N,N*)-PLY 配位子¹を有するゲルミレン[(*N,N*)-PLY]Ge:の合成と物性評価を行った。



- (1) Mukherjee, A.; Sau, S. C.; Mandal, S. K. *Acc. Chem. Res.* **2017**, *50*, 1679–1691.
- (2) Tsai, Y.-C. *Coord. Chem. Rev.* **2012**, *256*, 722–758.