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FULL PAPERS

Role of Carborane in Polymerization and Insertion Reactions

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摘要 Ligand modifications have played a crucial role in developing new catalyst precursors. A novel class of "constrained-geometry" ligands bearing a carboanion functionality has been developed by linking *o*-carboranyl and π-ligand together. They offer group 4 metal complexes higher activity in olefin polymerization compared to those with appended heteroatom systems. The results show that the [{η^5: σ-$Me_2A(C_5H_4)(C_2B_{10}H_{10})$}M] moiety remains intact in olefin polymerization and insertion reactions of various unsaturated molecules, and the electron-deficient yet sterically hindered icosahedral carborane does play an important role in the reactions. This article provides an overview of our recent work on this subject.

关键词 carborane, polymerization, insertion

分类号

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Key words carborane polymerization insertion

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