Ceramics from molecular precursors. Transition metal activation of silicon-carbide precursors. Corriu, Robert J. P.; Enders, Markus; Huille, Sylvain; Lutsen, Laurence; Moreau, Joel J. E. CNRS, Universite Montpellier II, Montpellier, Fr. NATO ASI Ser., Ser. E (1995), 297(Applications of Organometallic Chemistry in the Preparation and Processing of Advanced Materials), 185-199. CODEN: NAESDI ISSN: 0168-132X. Journal; General Review written in English. CAN 125:148841 AN 1996:426553 CAPLUS

Abstract

A review with 16 refs. on the prepn,of ceramic materials from polymeric silicon carbide precursors contg. SiH2 functional groups that are easily activated by transition metal complexes. The increased reactivity of the Si center in the chains allows an early crosslinking and rearrangement of the polymeric network. The use of transition metal catalyst is of interest for the processing of such polymeric material to give after pyrolysis high yields of ceramic residue.