

研究简报

γ -辐照乙烯-辛烯共聚物的固体核磁 ^{13}C 谱研究

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收稿日期 2005-9-6 修回日期 2005-12-8 网络版发布日期 接受日期

摘要

关键词 [\$\gamma\$ 辐射](#) [乙烯-辛烯共聚物](#) [固体核磁 \$^{13}\text{C}\$ 谱](#) [降解](#)

分类号

SOLID STATE ^{13}C -NMR STUDY OF γ -IRRADIATED POE

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Abstract Ethylene-octene copolymer(POE)samples exposed to γ -radiation under a series doses were investigated using solid state ^{13}C -NMR. The chemical shifts of POE were assigned, and the peak evolution as a function of radiation dose was discussed. An obviously chain scission was found near the branch carbons, and the ^{13}C -NMR spectra of the corresponding gels confirmed the result. Linewidths of irradiated POE samples of various absorbed doses were observed to which were related to the molecular mobility of the radiation-crosslinked polymer.

Key words [Ethylene-octene copolymer \(POE\)](#) [\$\gamma\$ -Radiation](#) [Solid-state \$^{13}\text{C}\$ -NMR](#) [Degradation](#)

DOI:

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