

研究简报

## 侧链含羟基聚(D,L-丙交酯-co-碳酸酯)的合成与表征

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摘要

关键词 [聚\(D L-丙交酯-co-碳酸酯\)](#) [功能化](#) [生物材料](#)

分类号

## SYNTHESIS AND CHARACTERIZATION OF POLY(D,L-LACTIDE-co-CYCLIC CARBONATE)S WITH HYDROXYL PENDANT FUNCTIONAL GROUPS

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**Abstract** A six-member cyclic carbonate with protected functional groups was synthesized from tetramethylolmethane, benzaldehyde and ethyl chloroformate. Copolymerization of D,L-lactide with cyclic carbonate was carried out through conventional ring-opening polymerization using Sn(Oct)<sub>2</sub> as the catalyst. The effects of different catalysts, polymerization time and monomer-to-catalyst molar ratio on the molecular weight were investigated. The methods of removing protected groups were studied. Results showed the protected groups were effectively removed via catalytic hydrogenation. Poly(D,L-lactide-co-cyclic carbonate)s with hydroxyl pendant functional groups was obtained.

**Key words** [Poly \(D L-lactide-co-cyclic carbonate\) s](#) [Functionalization](#) [Biomaterials](#)

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