

Synthesis of Stereocontrolled Polymer by Radical Polymerization Assistant Professor Miki Niwa

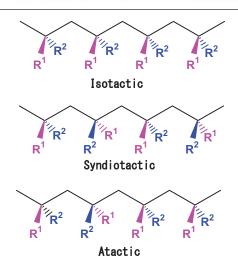


Fig.1 Tacticity of polymer



Fig.2 Applications

Content:

Radical polymerization is a general synthetic method of polymer. Radical polymerization is industrially used widely as a cheap price and simple method. However, it is difficult to control the tacticity of polymer by radical polymerization. If tacticity is controlled, the physical properties of a polymer are improved and expansion of use application.

We are studying the synthetic method and mechanism of isotactic polymer by radical polymerization.

Moreover, in our continuous works on the functional polymers synthesis through a radical polymerization of the bio-based monomers including lactic acid-, and amino acid-based monomers, we found that most of these monomers were easily polymerized with radical initiator to give a stereospecific polymer.

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