Introduction

Using a fluorescence technique previously researched by the Jin group, bulk non-isothermal crystallization behavior in single layer PLLA was studied. The change in emission intensity of a fluorescent dye doped or labeled PLLA sample was monitored during a non-isothermal cooling trial.

Materials and Methods

- Synthesis of CN-PLLA (labeled)
- Characterizations
  - X-Ray Diffraction (XRD)
  - Differential Scanning Calorimetry (DSC)
  - Size Exclusion Chromatography (SEC)

Results

![Graph showing fluorescence intensity changes over temperature](image)

Future Work

Test efficacy of technique in isothermal crystallization, continue to study crystal microstructures, study bilayer films.

Conclusions

The technique resembled characterization of PLLA through DSC which confirmed the validity of the technique, while maintaining advantages to traditional techniques.

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