

Supplementary Information

ROMP of acetoxy-substituted dicyclopentadiene to linear polymer with high T_g

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1. NMR spectrum of the AcO-DCPD and PAD

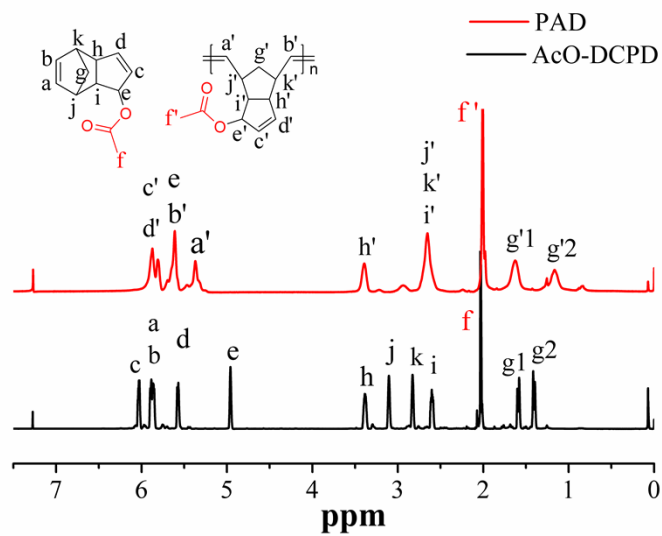


Fig. A ^1H NMR spectrum of AcO-DCPD and PAD (in CDCl_3)

2. GPC trace of the PADs

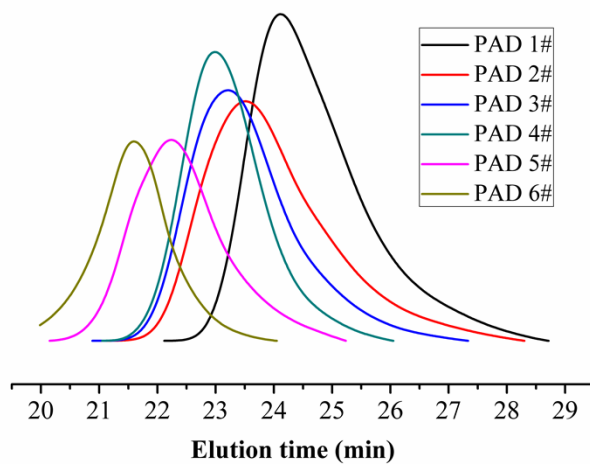


Fig. B GPC trace of PADs

3. Characterization information

^1H NMR, ^{13}C NMR and ^1H - ^{13}C HMQC spectrum were recorded using tetramethylsilane (TMS) as an internal standard in chloroform-d (CDCl_3) on an Inova 400 spectrometer (Palo Alto, CA). The molecular weight and molecular distribution of the polymers were determined with reference to polystyrene standards on a Waters GPC (Waters, USA) at 30 °C, in THF for polymers and a flow rate of 1 mL min $^{-1}$. The data of Thermogravimetric analytic (TGA) and Differential scanning calorimetry (DSC) were obtained from 10-12 mg samples under argon atmosphere, at a heating rate of 5 °C per minute, using a STA-449C Thermogravimetric Analyzer (NETZSCH, Germany).