

A grazing incident XRD study on the structure of poly(3-hydroxybutyrate) ultrathin films sandwiched between Si wafer and amorphous polymers

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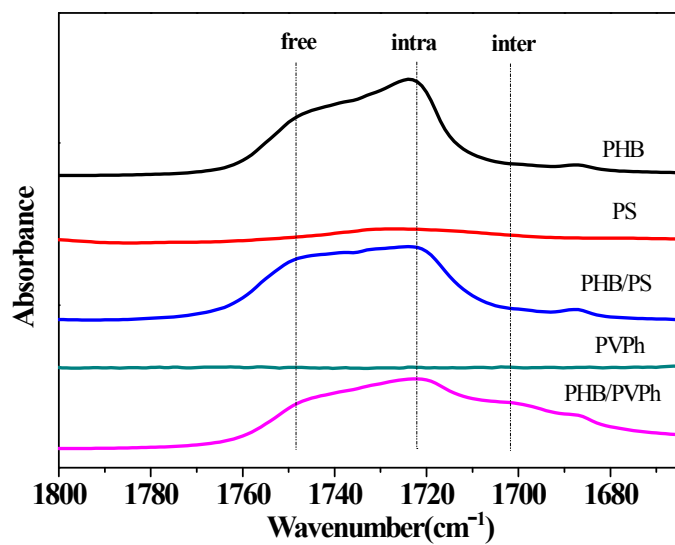


Figure S1. Infrared spectra in the C=O stretching region of as cast neat PHB, 50/50 PHB/PS, 50/50 PHB/PVPh.

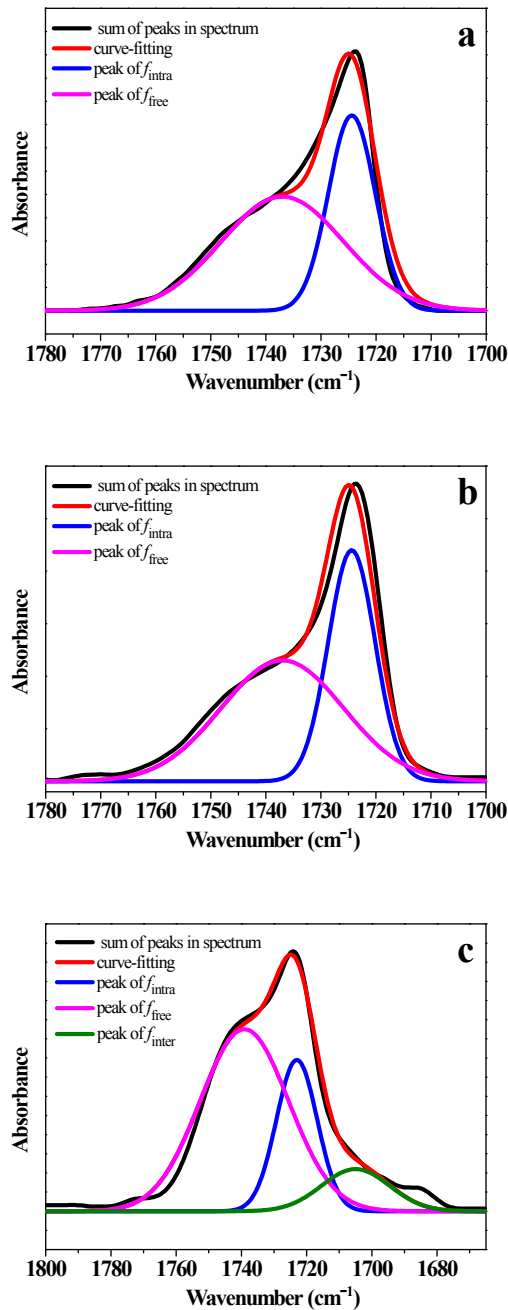


Figure S2. Decomposition of observed Infrared spectra in the C=O stretching region for (a) PHB on Si wafer annealed at room temperature for 27h, (b) PHB sandwiched between PS layer and Si wafer annealed at room temperature for 40h, (c) PHB sandwiched between PVPh layer and Si wafer annealed at room temperature for 62h into first kind of amorphous component of PHB (1737 cm⁻¹ for (a) and (b), 1739 cm⁻¹ for (c) , second kind of crystal component of PHB(1723cm⁻¹ for (a),(b),(c)), hydrogen bonded component (C=O...O-H) between PHB and PVPh(1705cm⁻¹).