

**The Effect of Poly(vinyl phenol) Sublayer on the Melting Behavior of
Poly(butylene adipate) Crystals**

Quan Li, Jiandong Zhou, Liguo Chai, Jamil Memon, Zhongjie Ren, Huihui Li, Xiaoli Sun* and Shouke Yan*

*† State Key Laboratory of Chemical Resource Engineering, Beijing University of Chemical Technology, Beijing 100029, China (skyan@mail.buct.edu.cn;
xiaolisun@mail.buct.edu.cn)*

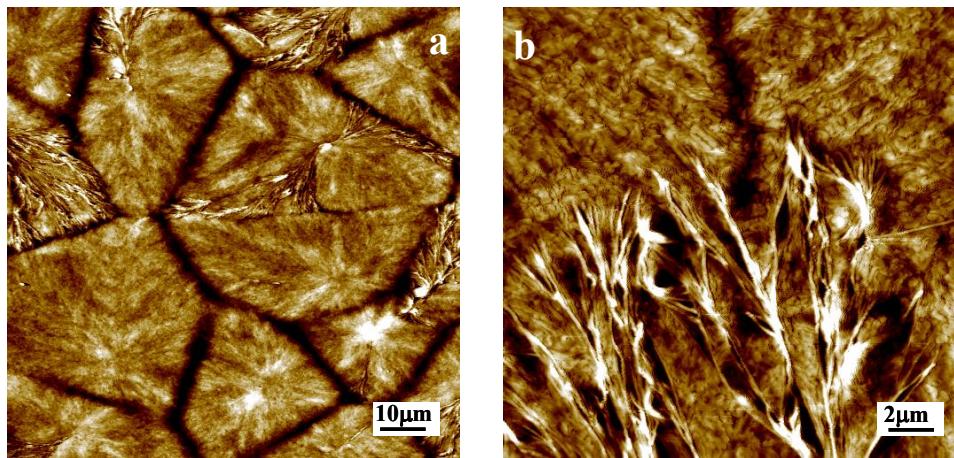
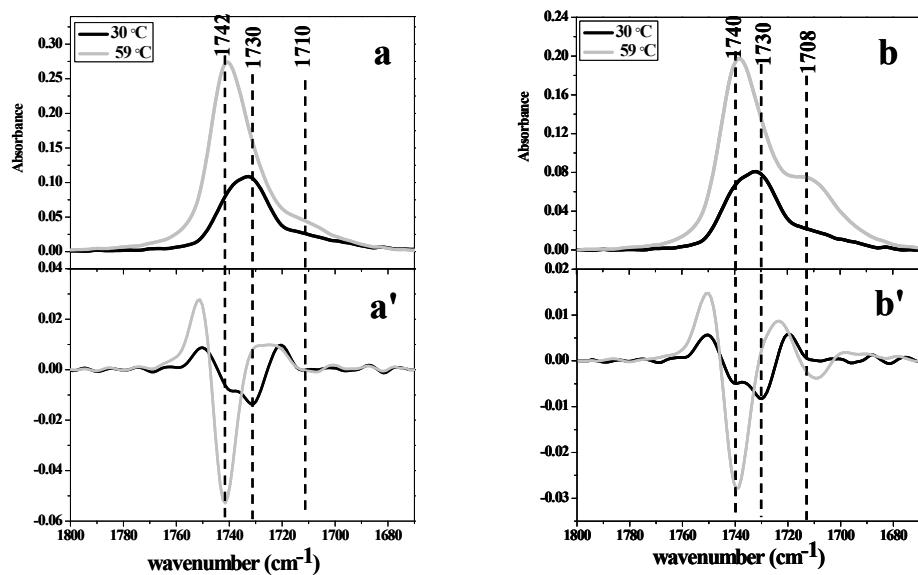


Figure S1 The AFM images of 192 nm thick PBA thin film on Si wafer at (a) larger scale and (b) smaller scale.



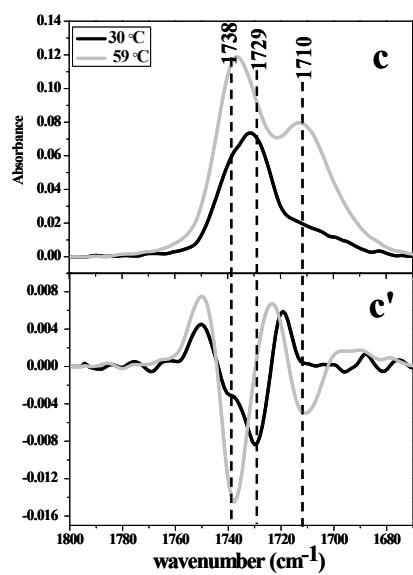


Figure S2 The IR spectra in the region of 1800-1670 cm⁻¹ for the 90 nm thick PBA film on (a) 20 nm, (b) 55 nm (a) 100 nm PVPh substrate. (a'), (b'), (c') are their second derivative spectra.

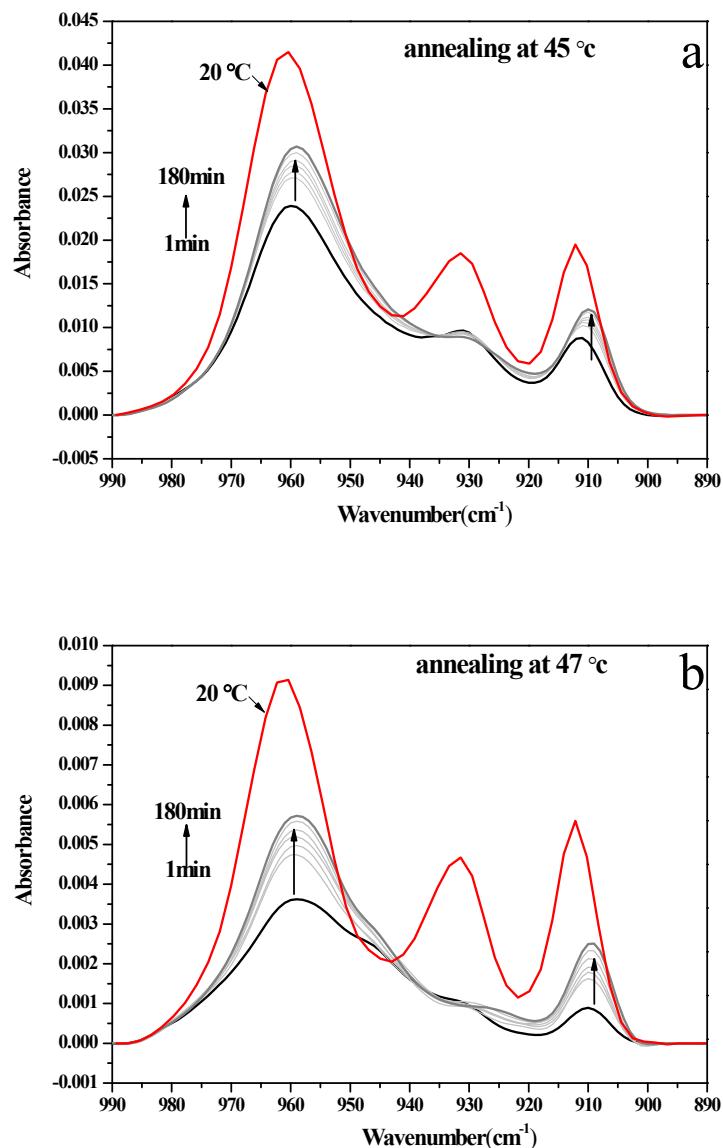


Figure S3 The IR spectra in the region of 990-890 cm⁻¹ for the 192 nm thick PBA film on Si isothermal annealed at (a) 45 °C and (b) 47 °C.

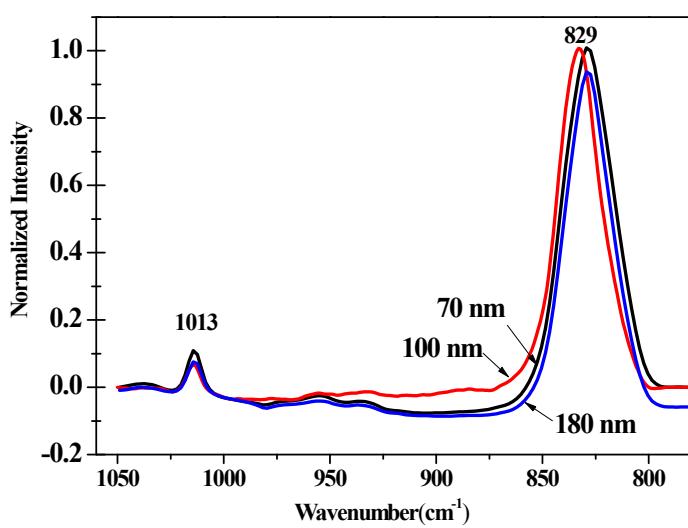


Figure S4 RAIR spectrum of PVPh film with three different thickness spin coated on gold. The polarization of the band at 829 cm^{-1} is perpendicular to the main chain of PVPh molecules and the polarization of the band at 1013 cm^{-1} is parallel to the main chain.