Lamellae evolution of poly(butylene succinate-*co*-terephthalate) copolymer induced by uniaxial stretching and subsequent heating

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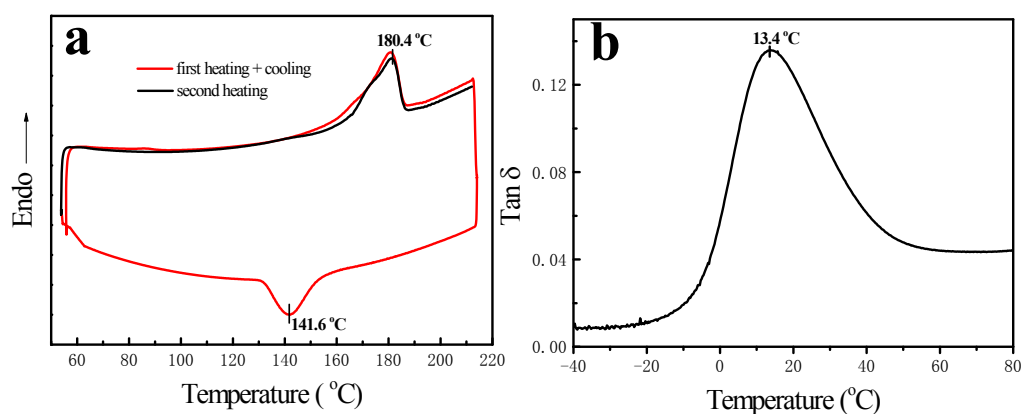E-mail address: J. Y. Lin (jinyoulin82@gmail.com);F. X. Li (fxlee@dhu.edu.cn)

Figure S1.(a)Differential scanning calorimeter (DSC) curves of PBST copolymer. About 7 mg sample sealed in an aluminum pan was heated to 210 ^{o}C at a rate of 20 ^{o}C/min (the first heating) and kept for 3 min before cooling at a rate of 10 ^{o}C/min to 50 ^{o}C under N_2 atmosphere. Subsequently, the sample was reheated up to 210 ^{o}C at a rate of 20 ^{o}C/min (the second heating). Temperature corresponding to the peak in the second heating cycle was defined as the melting point. (b) Dynamic mechanical analysis (DMA) was performed on TA Q800 dynamic mechanical analyser. The tests were carried out in tensile mode over a temperature range from -50 to 90 ^{o}C at a frequency of 1 Hz and heating rate of 5 ^{o}C/min. Temperature corresponding to the peak in tanδ curve was defined as glass transition temperature.
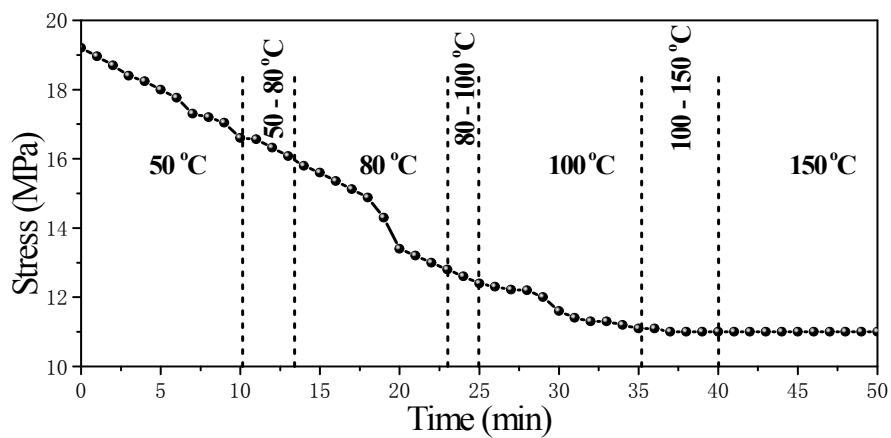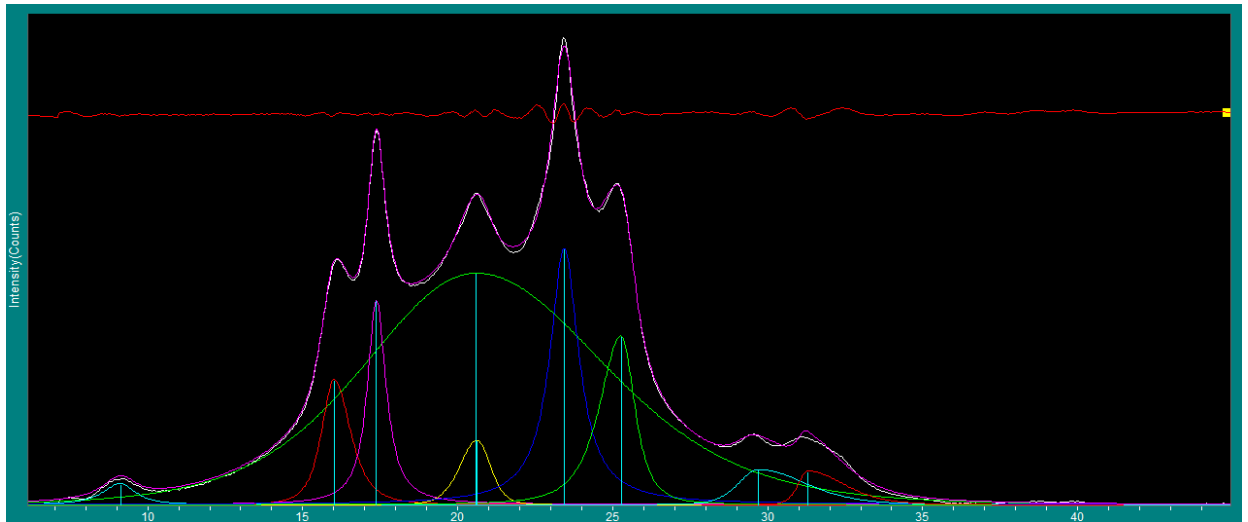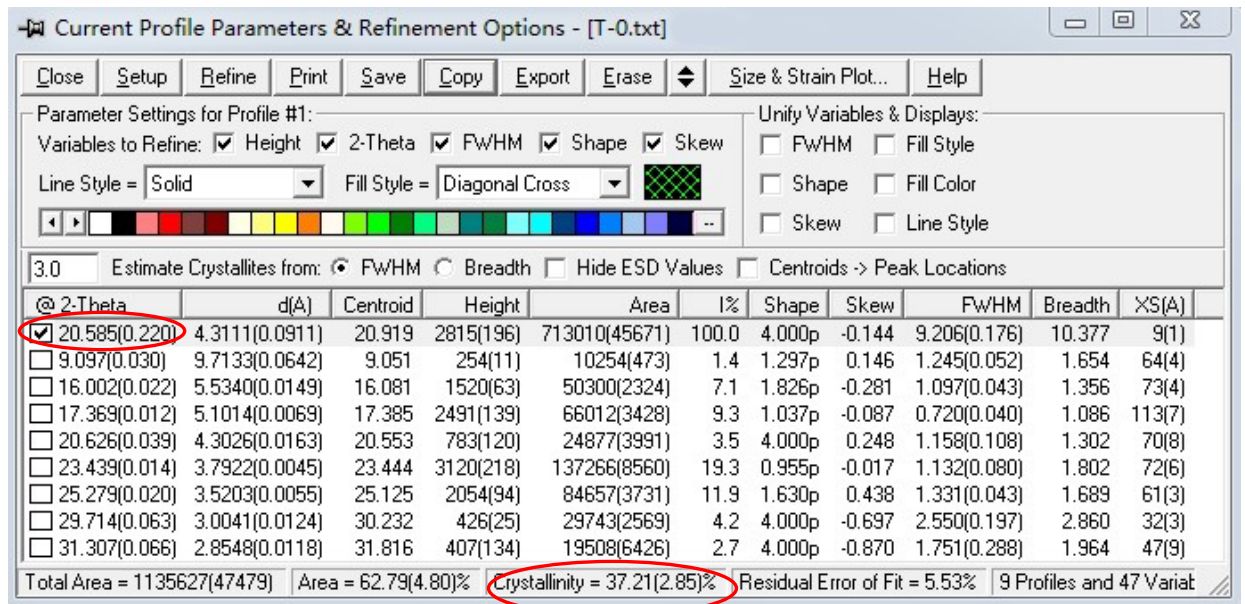
Figure S2. The stress relaxation curve of PBST copolymer during the heating process as a function of time.

(a)

(b)

Figure S3.(a) Peak fitting of XRD curve of PBST copolymer using the software of JADE 5.0 and (b) corresponding result of crystallinity calculated using the equation X_c= area of crystals peak / total area. The left tick in (b) is the fitted amorphous peak.