

Functionalized Boron Nitride Nanosheets/Poly(L-lactide) Nanocomposites and Their Crystallization Behavior

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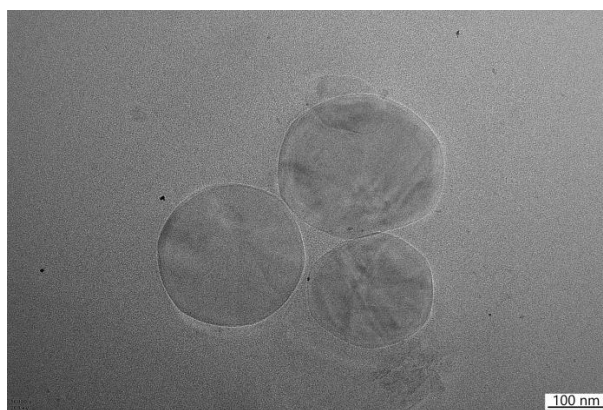


Figure S1. TEM image of hydroxyl-functionalized boron nitride nanosheets (OH-BNNS) .

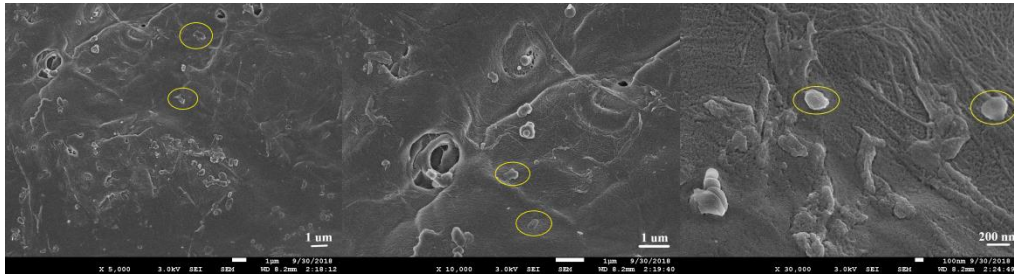
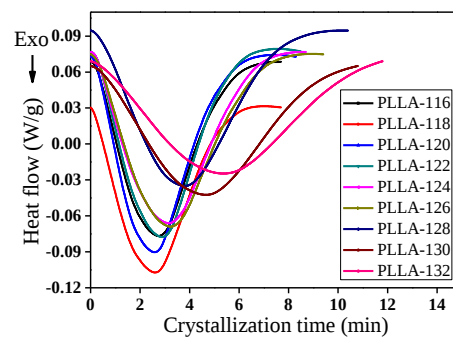
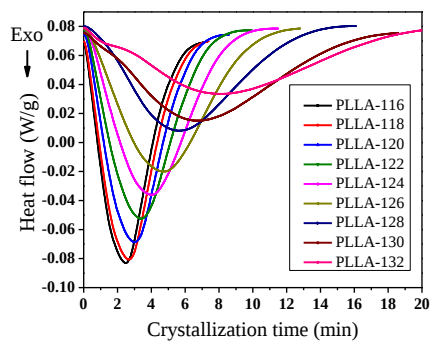


Figure 2. SEM images of the PLLA nanocomposite(with the OH-BNNS loading of 1wt %).

To characterize the morphology and dispersion state of OH-BNNS in the nanocomposite, the PLLA nanocomposite (1wt %) were examined by SEM. As displayed in Figure S2, OH-BNNS nanoplatelets were well separated in the matrix and no noticeable OH-BNNS aggregation was observed . This reflected good compatibility of OH-BNNS with the PLLA matrix.



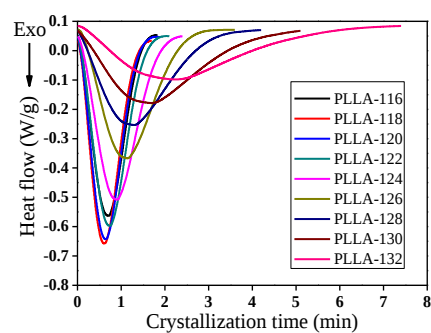


Figure S3. Heat flow curves of PLLA-0.5 (a) PLLA-1 (b) and PLLA-3 (c) during isothermal cold crystallization at different crystallization temperatures.

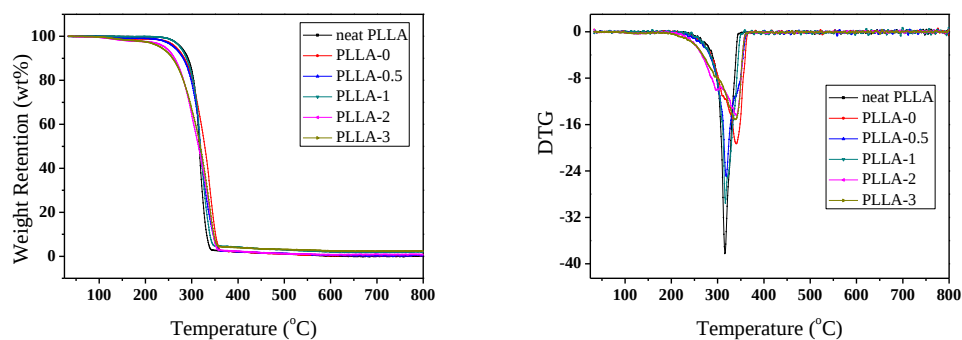


Figure S4. The TGA (a) / DTG (b) curves of neat PLLA and PLLA/OH-BNNS nanocomposites.

The weight loss curves upon heating and corresponding differential curves are shown in Figures S4 (a) and (b), respectively. The residual weight percentages at 700 °C are 0.42, 0.90, 1.80 and 2.51 wt% for PLLA-0.5, PLLA-1, PLLA-2 and PLLA-3, respectively.