The supporting information of

**Chemical Assembling of Amine Functionalized Boron Nitride Nanotubes onto Polymeric Nanofiber Film for Improving their Thermal Conductivity**

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Experimental Process

Figure S1. Schematic preparation process of (a) the amine functionalization of BNNTs, (b) PAA/PVA nanofibrous thin films, and (c) the physical and chemical assembly of functionalized BNNTs onto PAA/PVA nanofibrous thin films.
Evidence of \( a \)-BNNTs synthesis

**Figure S2.** FT-IR of the pristine, chlorinated and amine functionalized BNNTs and the bending vibration portion between 700 nm and 760 nm, which is related with B-N and C-Cl bond, is enlarged and deconvoluted.

**Figure S3.** XPS Cl 2p spectra of the chlorinated and amine functionalized BNNTs.
Figure S4. XPS N 1s and B 1s spectra of the pristine, chlorinated and amine functionalized BNNTs.

Figure S5. Thermogravimetric curves of the pristine, chlorinated and amine BNNTs.
The assembling of functionalized BNNTs onto PAA/PVA nanofibrous film

Figure S6. XPS (a) N1s and (b) B 1s spectra of the pristine PAA/PVA nanofibrous thin film and the physically and chemically assembled nanofibrous thin films with functionalized BNNTs.
Figure S7. TG and DTG graphs for (a) PAA/PVA, (b) PAA/PVA-phys, and (c) PAA/PVA-chem
Figure S8. MD models for (a) pristine PAA/PVA nanofibrous thin film, (b) physical assembled and (c) chemical assembled PAA/PVA films with functionalized BNNTs.