

Supplementary Materials

There are two stages for the thermal imidization procedure.

a. First is the stepped heating stage, the detailed heating rate showed as follow:

$$25^{\circ}\text{C} \xrightarrow[30 \text{ min}]{2.5^{\circ}\text{C}/\text{min}} 100^{\circ}\text{C} (1 \text{ h}) \xrightarrow[30 \text{ min}]{3.3^{\circ}\text{C}/\text{min}} 200^{\circ}\text{C} (1 \text{ h}) \xrightarrow[45 \text{ min}]{3.3^{\circ}\text{C}/\text{min}} 350^{\circ}\text{C} (1 \text{ h})$$

b. Then is the cooling stage, the detailed cooling rate showed as follow:

$$350^{\circ}\text{C} \xrightarrow[420 \text{ min}]{-0.77^{\circ}\text{C}/\text{min}} 25^{\circ}\text{C}$$

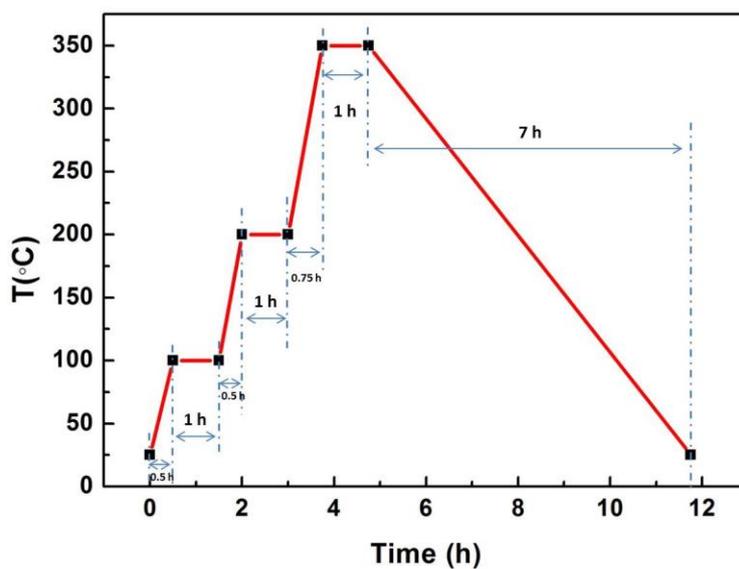


Figure S1. Thermal imidization procedure.