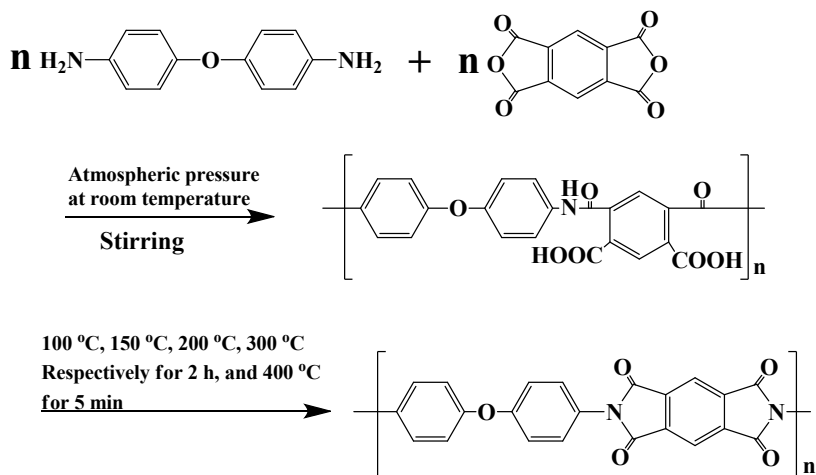


Electronic Supplementary Information (ESI)

Experimental details



Scheme S1 Synthesis of PI

Preparation of GO

GO was prepared according to the Hummers method by reacting graphite (2g) and NaNO_3 (1g) with conc. H_2SO_4 (46mL). This mixture was stirred in an ice-water bath, and 6g of KMnO_4 was slowly added while stirring, and the rate of addition was carefully controlled to prevent the mixture temperature from exceeding 20°C. The mixture continued to be stirred for 2h in an ice-water bath for further development of oxidation. Then the mixture was transferred to a 35 °C oil bath and stirred for 0.5 h, forming a thick paste. Subsequently, 100mL de-ionized water was added gradually. Immediately, temperature was raised to 98 °C. After another 15min, the mixture was added to 300 mL de-ionized water and 20 mL 30% H_2O_2 . The mixed solution was then filtered and washed with 5% HCl and de-ionized to neutral. The product was dried at 60°C under vacuum, producing 3.2 g GO.