## Melt-Processable Semicrystalline Polyimides Based on 1,4-Bis(3,4-dicarboxyphenoxy)benzene Dianhydride (HQDPA): Synthesis, Crystallization and Melting Behavior

Hongfei Zhang<sup>1,2</sup>, Wei Wang<sup>1</sup>, Guofei Chen<sup>1</sup>, Anjiang Zhang<sup>1</sup>, Xingzhong Fang<sup>1</sup>\*

- Key Laboratory of Additive Manufacturing Materials of Zhejiang Province, Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, 1219 Zhongguan West Rd, Zhenhai District, Ningbo, Zhejiang, 315201, China.; fxzhong@nimte.ac.cn
- <sup>2</sup> University of Chinese Academy of Sciences, 19 A Yuquan Rd, Shijingshan District, Beijing, 100049, China.; zhanghf@nimte.ac.cn
- \* Correspondence: fxzhong@nimte.ac.cn; Tel.: +86-574-86685185

## **Supplementary Materials:**

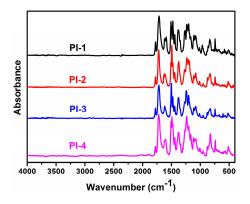


Figure S1. FTIR spectra of polyimides

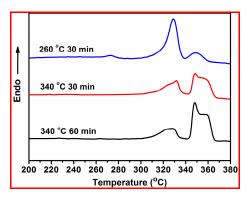


Figure S2. DSC curves of PI-1 after different isothermal treatment.

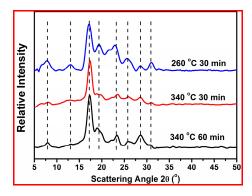


Figure S3. WAXD patterns of PI-1 after different isothermal treatment

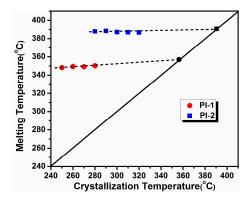
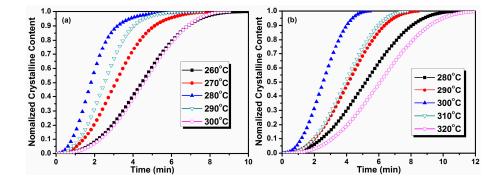
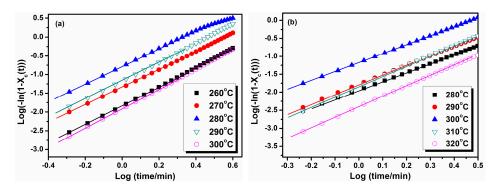


Figure S4. Hoffman-Weeks plot for PI-1 and PI-2.



**Figure S5.** Normalized crystalline content as a function of time at various crystallization temperatures. (a) PI-1, (b) PI-2.



**Figure S6.** Avrami plot of log [-ln (1-*X*<sub>c</sub>(*t*))] versus log *t* at various crystallization temperatures. (a) PI-1, (b) PI-2.