

Supplementary information

Electrospun nanofibrous membrane of fluorine-containing triptycene-based polyimides for oil/water separation

Tian-Long Zhai,^{‡a} Qing Du,^{‡a} Sheng Xu,^b Yan Wang,^b and Chun Zhang^{*a}

^a Key Laboratory of Molecular Biophysics of the Ministry of Education, College of Life Science and Technology Huazhong University of Science and Technology, National Engineering Research Center for Nanomedicine, Wuhan, 430074, China.

^b School of Chemistry and Chemical Engineering, Huazhong University of Science and Technology, Wuhan, 430074, China

[‡] These authors contributed equally to this work.

* E-mail: chunzhang@hust.edu.cn

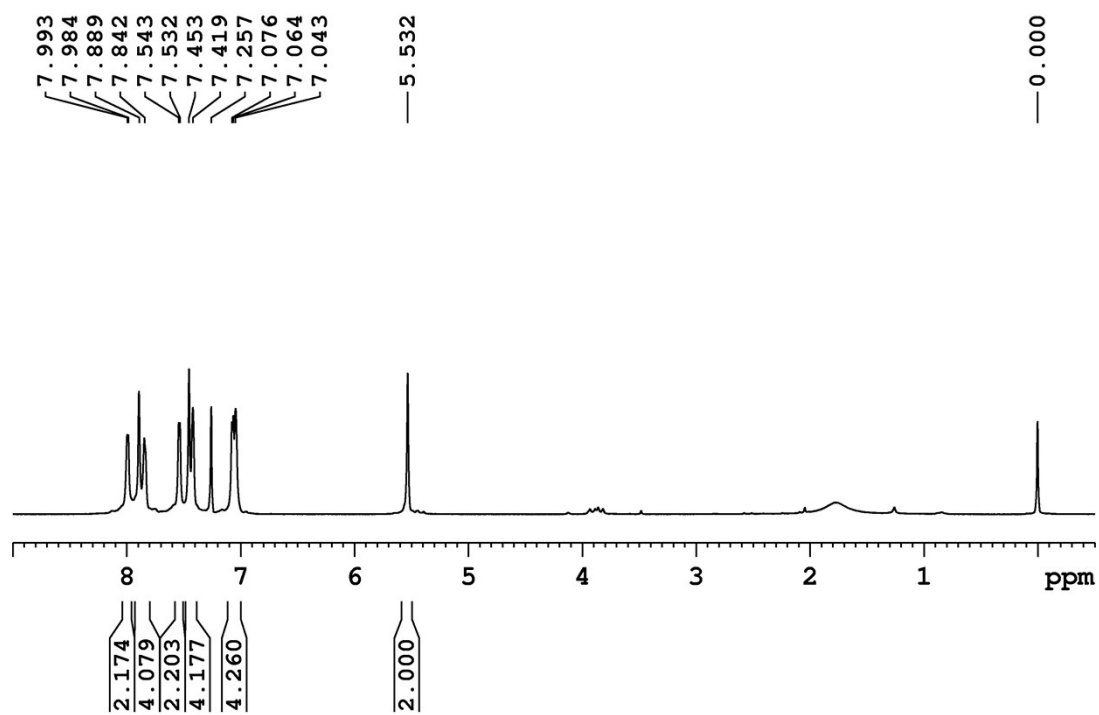


Fig. S1 ^1H NMR spectrum (600 MHz, CDCl_3) of FTPI.

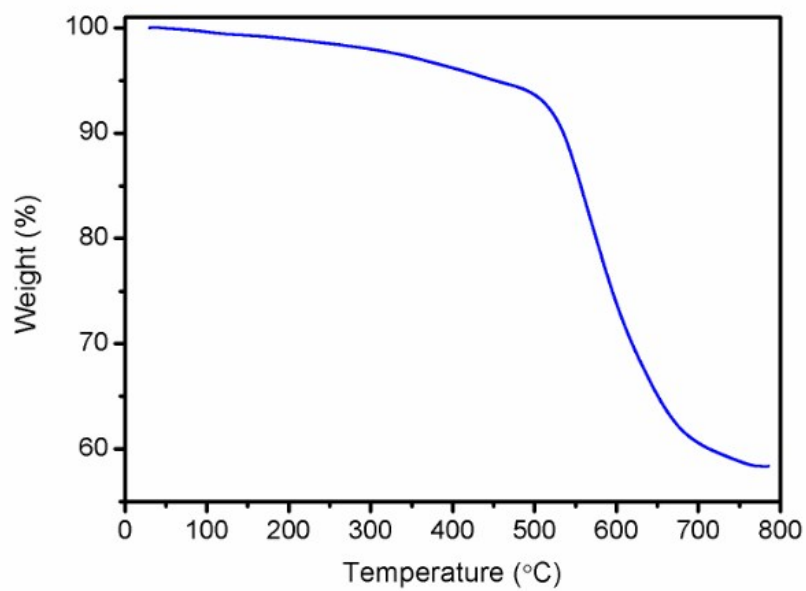


Fig. S2 TGA data of FTPI.

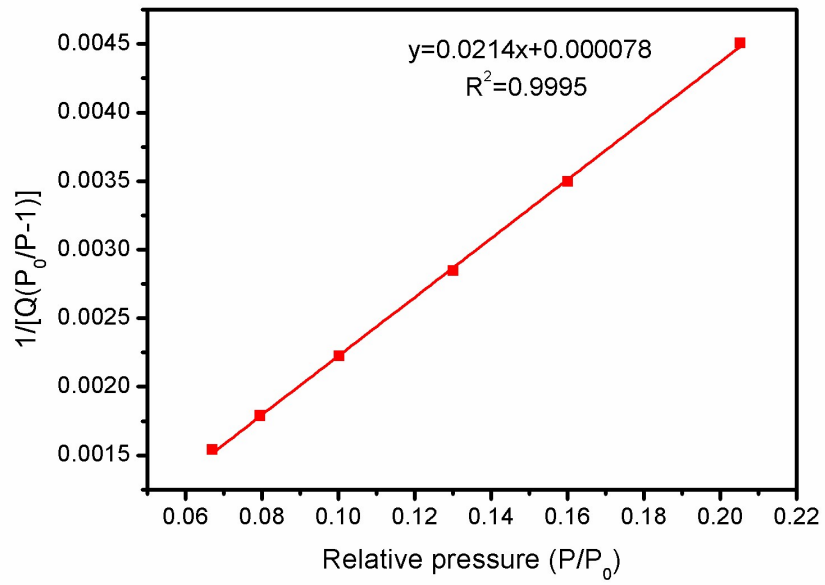


Fig. S3 BET plot of FTPI.

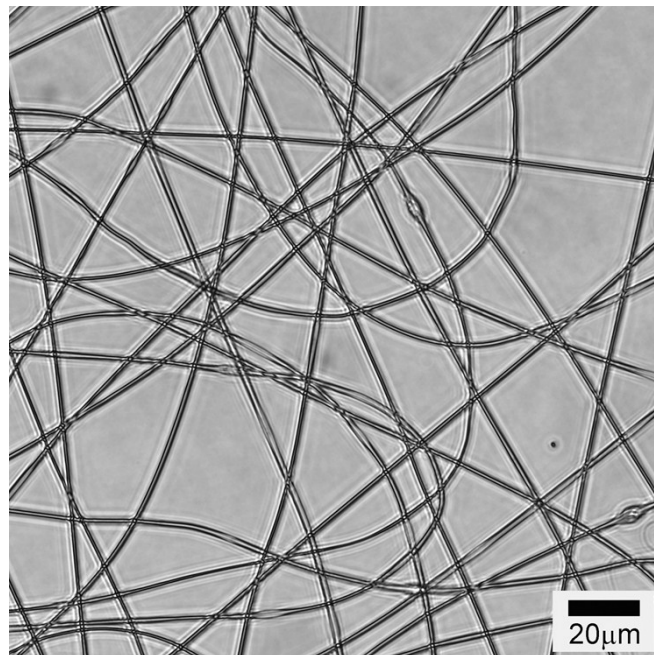


Fig. S4 Microscope image of the beaded fibers.

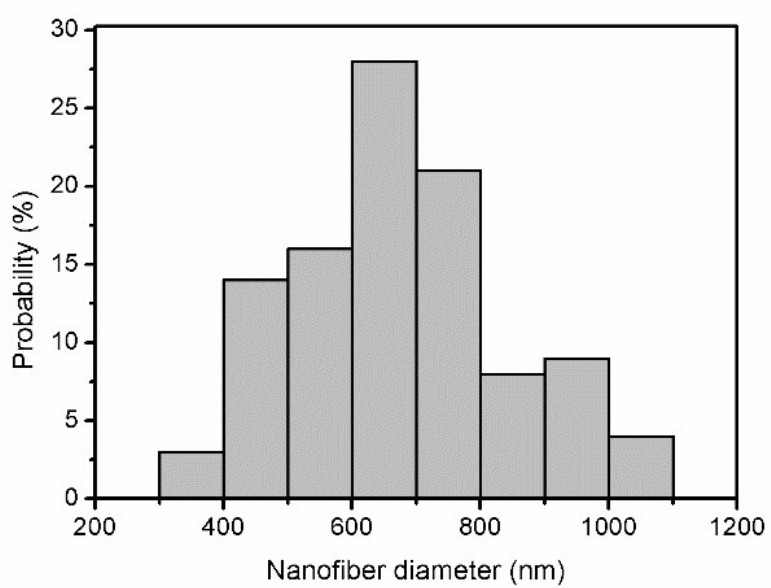


Fig. S5 The distribution diagram of fiber diameters.



Fig. S6 Photograph of FTPI nanofibrous membrane (membrane diameter: 4cm).

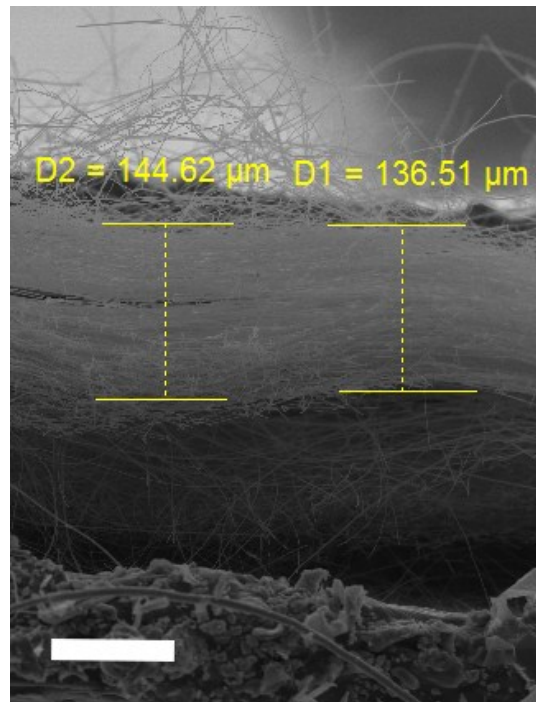


Fig. S7 The SEM image of the cross-section (Scale bar: 100 μ m).

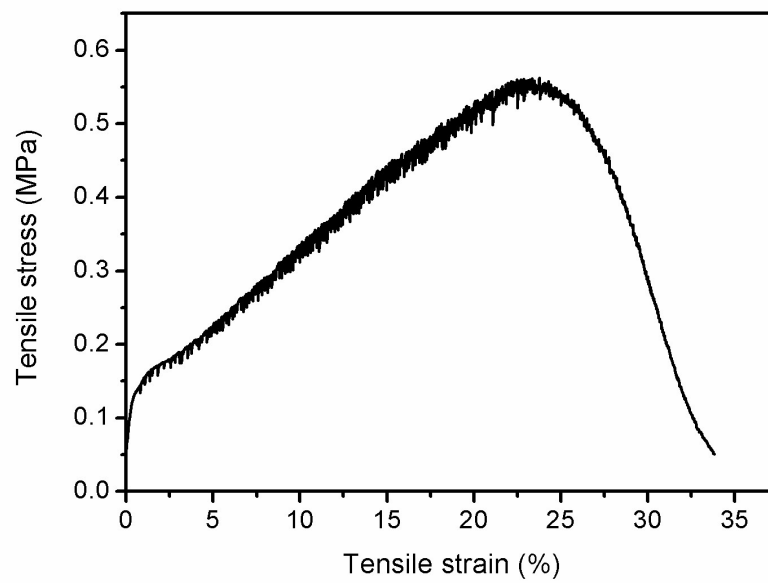


Fig. S8 The stress-strain behavior of **FTPI** nanofibrous membrane.

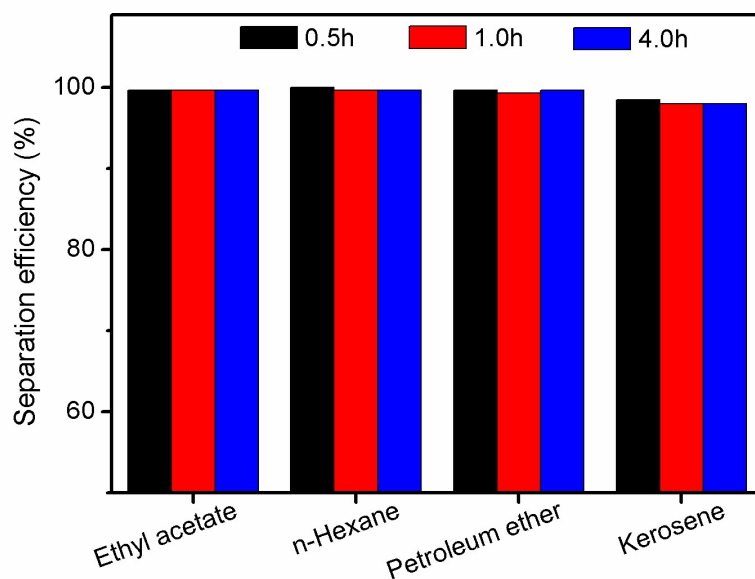


Fig. S9 The separation efficiency of nanofibrous membranes for different electrospinning duration.

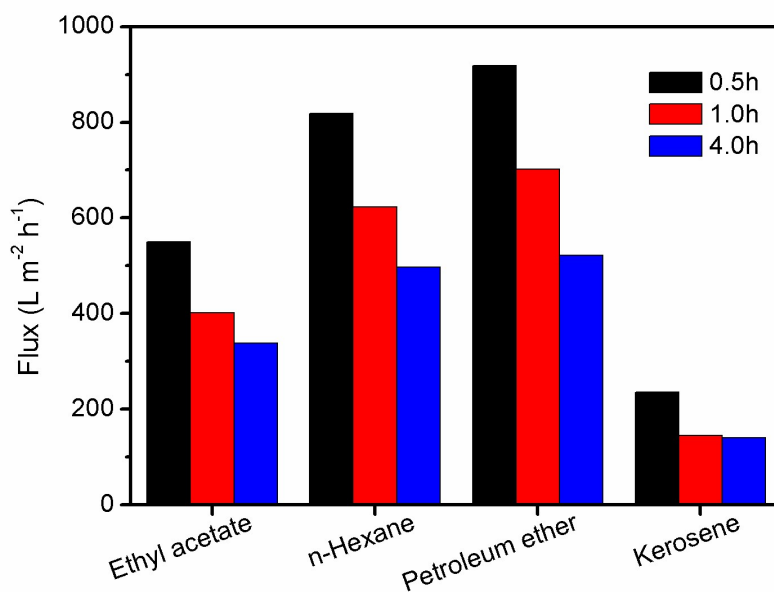


Fig. S10 The flux of nanofibrous membranes for different electrospinning duration.