Supporting information

for

Phase Separation in Electrospun Nanofiber Depending on Crystallization Induced Self-assembly

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$^1$H-NMR spectra

PPDO precursor: $^1$H-NMR (CDCl$_3$, 400 MHz)
Fig. S1 $^1$H-NMR spectrum of PPDO precursor

PPDO-b-PEG multi-block copolymer: $^1$H-NMR (CDCl$_3$, 400 MHz)

![H-NMR spectrum of PPDO precursor](image)

Fig. S2 $^1$H-NMR spectrum of PPDO-b-PEG copolymer

FITR spectrum of PPDO-b-PEG copolymer

![FITR spectrum of PPDO-b-PEG copolymer](image)

Fig. S3 The FTIR spectra of the PPDO-b-PEG multi-block copolymer

Selective etching of electrospun mat

The following equation was used to calculate the mass loss of the electrospun mat after
where $w_a$ and $w_b$ are the weight of the electrospinning mat before and after selective etching, respectively. The mass losses of the PLA/PPDO-b-PEG samples, calculated by weighting the samples before and after selectively removing PPDO-b-PEG, are 23.8 wt%, 23.4 wt%, 25.5 wt%, and 22.2 wt%, respectively, and very close to the weight content of PPDO-b-PEG in spinning solution.

**Table S1** mass loss of PLA/PPDO-b-PEG nanofiber after selective etching of PPDO-b-PEG

<table>
<thead>
<tr>
<th>DMF content (%)</th>
<th>$w_a$ (g)</th>
<th>$w_b$ (g)</th>
<th>mass loss (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0.0336</td>
<td>0.0256</td>
<td>23.8</td>
</tr>
<tr>
<td>10</td>
<td>0.0368</td>
<td>0.0282</td>
<td>23.4</td>
</tr>
<tr>
<td>20</td>
<td>0.0276</td>
<td>0.0206</td>
<td>25.5</td>
</tr>
<tr>
<td>30</td>
<td>0.0406</td>
<td>0.0316</td>
<td>22.2</td>
</tr>
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