

Supplementary Materials

Preparing Polypyrrole-Coated Stretchable Textile via Low-Temperature Interfacial Polymerization for Highly Sensitive Strain Sensor

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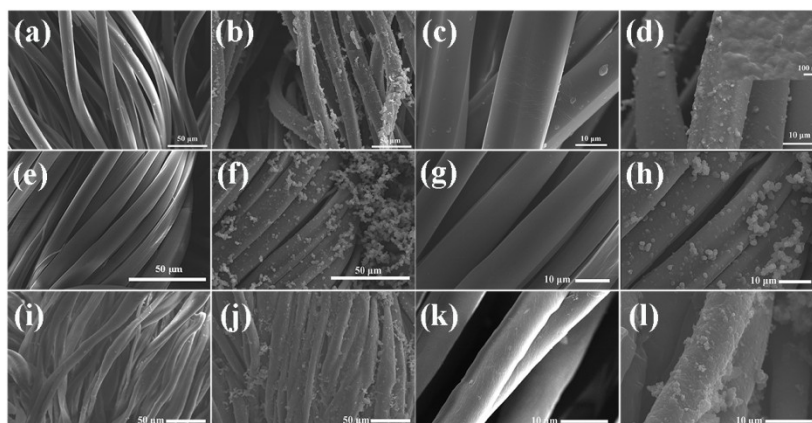


Figure S1. SEM images of pristine nylon/lycra, silk and cotton fabrics at low (a,e,i) and high magnifications (c,g,k); SEM images of PPy-coated nylon/lycra, silk and cotton fabrics at low (b,f,j) and high magnifications (d,h,l).

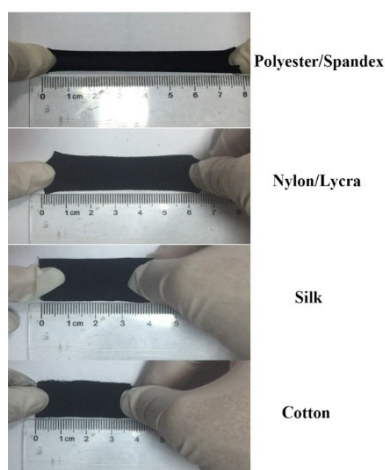


Figure S2. PPy-coated polyester/spandex, nylon/lycra, silk and cotton textiles stretched to the maximum strain.

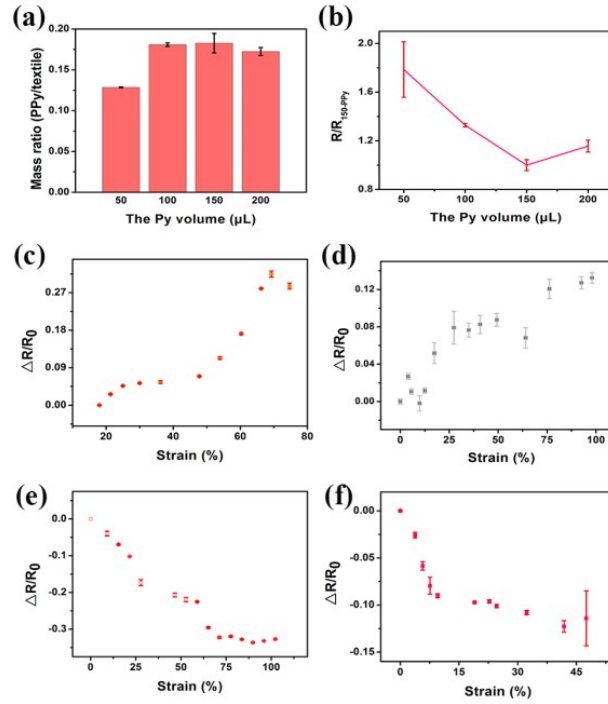


Figure S3. Mass ratios (a) of surface-coated PPy to the textile and resistance ratios (b) of the as-prepared conducting textiles after polymerization with different volume of Py. Relative resistance change ($\Delta R/R_0$) of the as-prepared textiles prepared with 50 μL Py (c), 100 μL Py (d), 150 μL Py (e) and 200 μL Py (f).

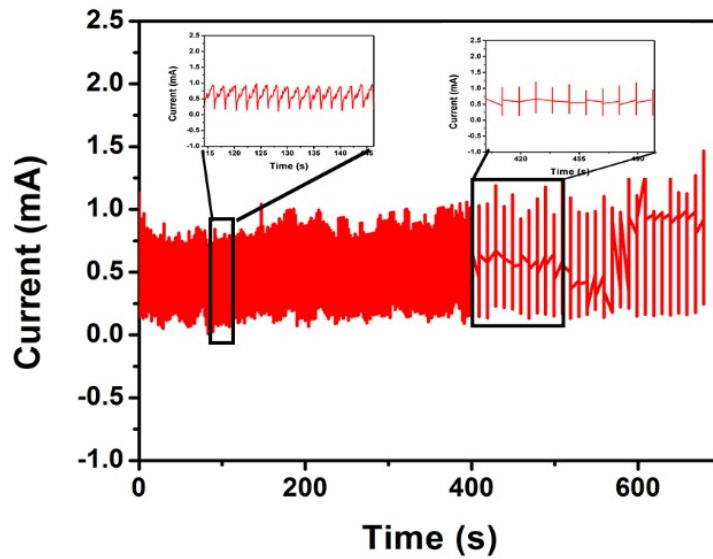


Figure S4. Current responses of a textile-based sensor upon periodic stretching-releasing cycles under a strain of 26%