Electronic Supplementary Material (ESI) for RSC Advances.

Highly Conductive PEDOT:PSS Treated by Sodium Dodecyl Sulfate for Stretchable Fabric Heaters

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Supplementary Figure 1.

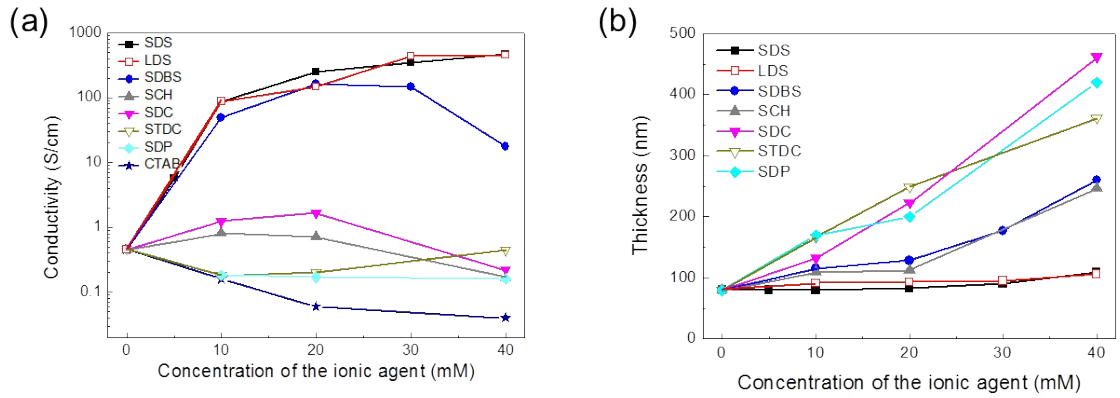

Fig. S1 (a) Average conductivity and (b) thickness of PEDOT:PSS film blended by ionic agents with various functional groups

Supplementary Figure 2.

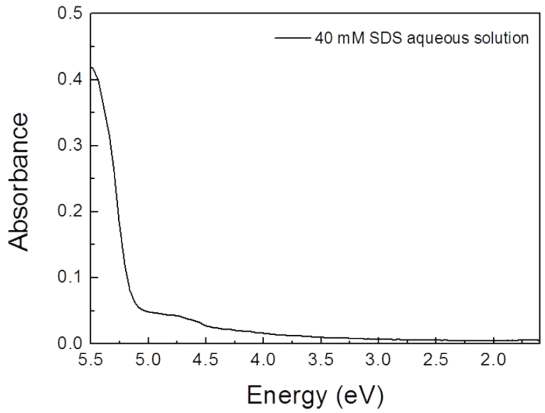

Fig. S2 UV-Vis/NIR absorption of SDS solution (40 mM)

Supplementary Figure 3.

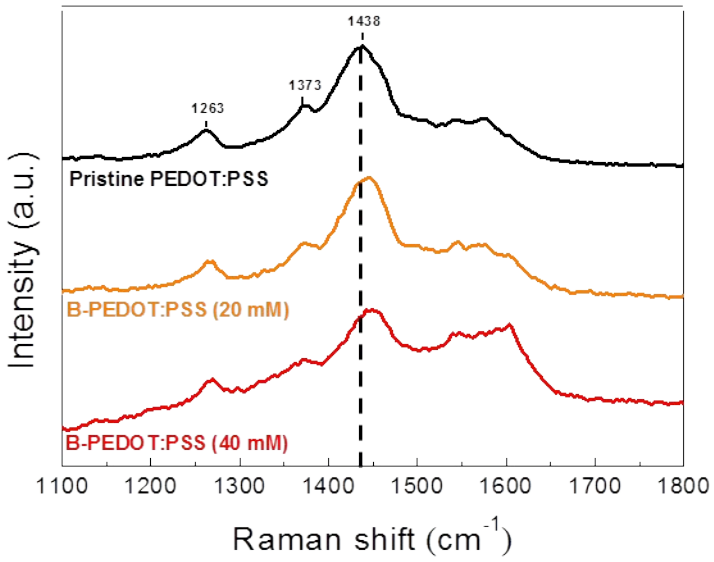

Fig. S3 Raman spectra of pristine- and B-PEDOT:PSS films

Supplementary Figure 4.

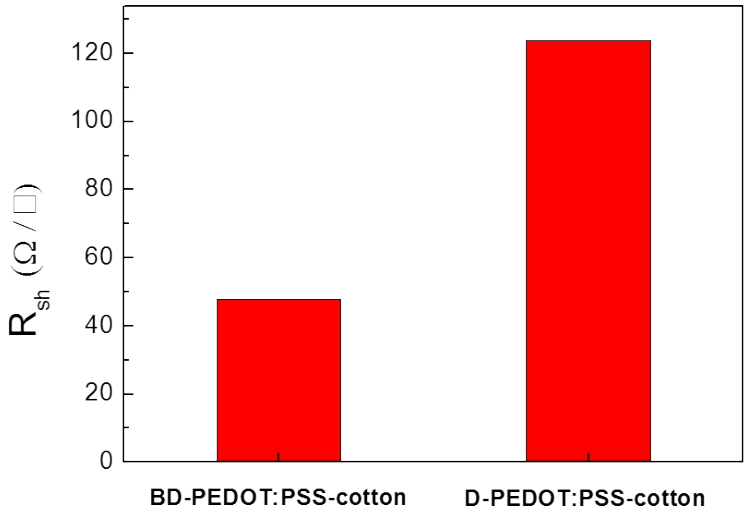

Fig. S4 Sheet resistance of D-PEDOT:PSS-cotton and BD-PEDOT:PSS-cotton

Supplementary Figure 5.

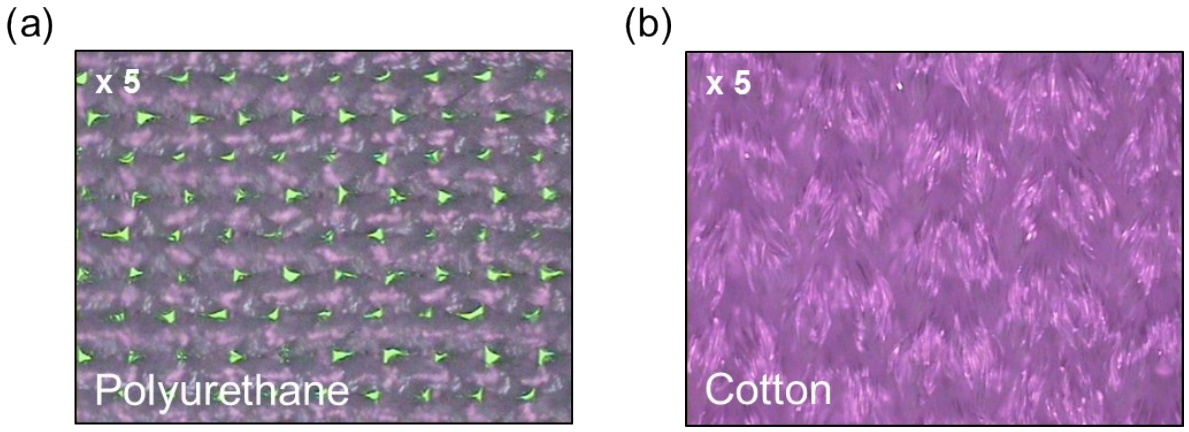

Fig. S5 Optical images of polyurethane and cotton substrates

Supplementary Figure 6.

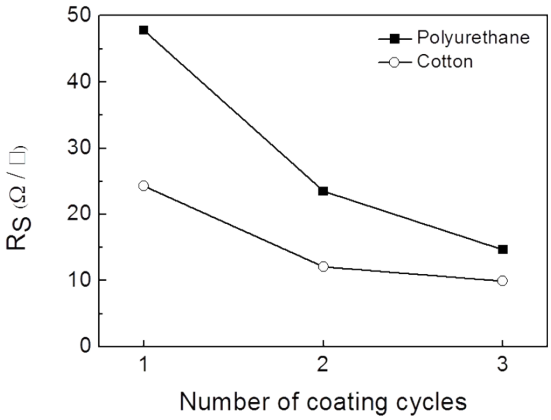

Fig. S6 Sheet resistance of BD-PEDOT:PSS-cotton and –polyurethane with respect to the number of coating cycles

Supplementary Figure 7.

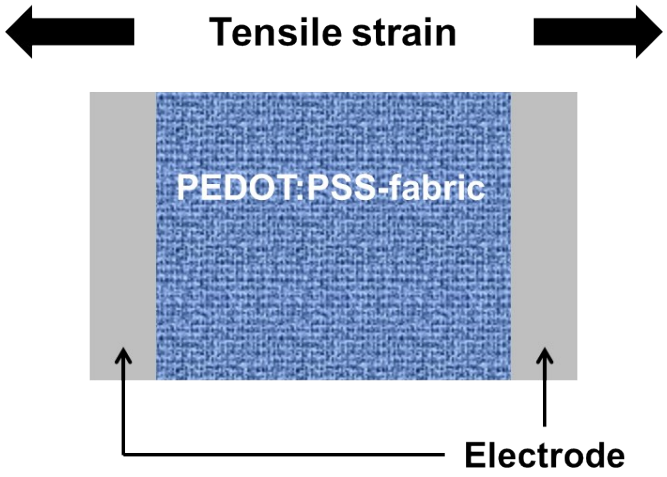

Fig. S7 Schematic of strain experiment for PEDOT:PSS-fabric. Electrodes were formed by using Ag paste.

Supplementary Figure 8.

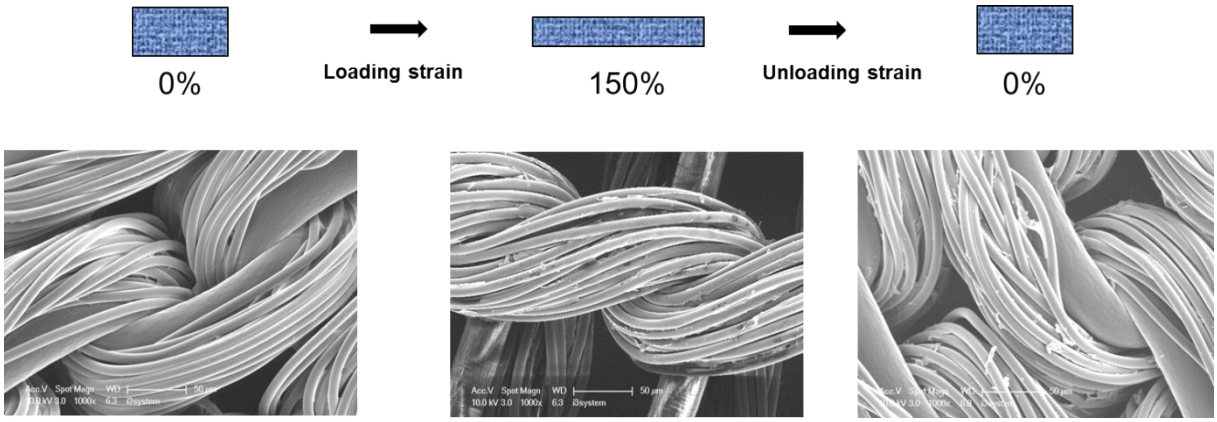

Fig. S8 SEM images of BD-PEDOT:PSS-polyurethane before and after loading 150% tensile strain.

Supplementary Figure 9.

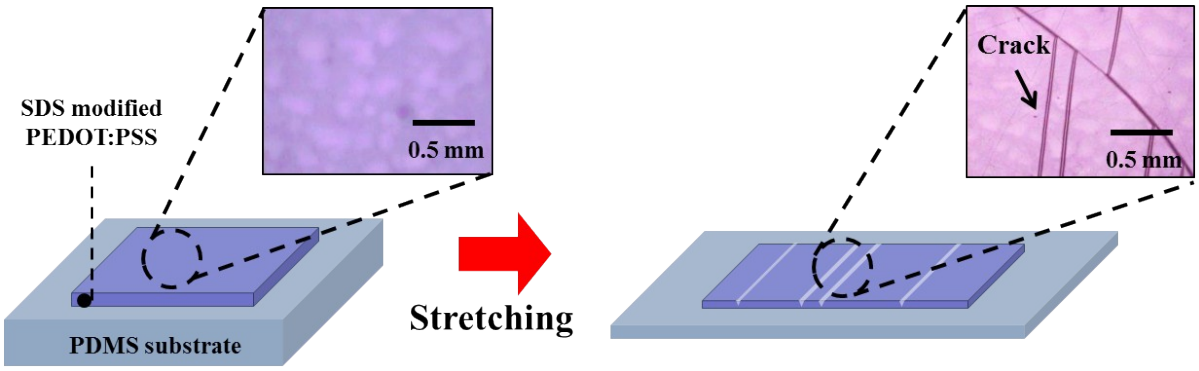

Fig. S9 Schematic and optical images after stretching SDS modified PEDOT:PSS films spin-coated on PDMS substrate.

Supplementary Figure 10.

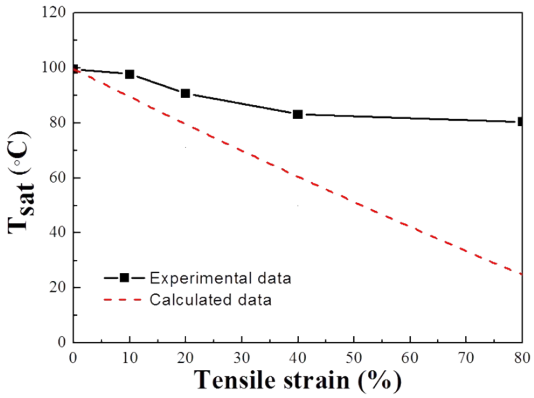

Fig. S10 Saturated temperature of BD-PEDOT:PSS-cotton with respect to tensile strain. The dotted and single lines correspond to the calculated and experimental data, respectively. The 12 V was applied at 26 °C.