

Supporting Information



Fig. S1 From left to right, color of each cotton fabric sample at different ELD plating time 30 , 60, 90, 120 and 150 min

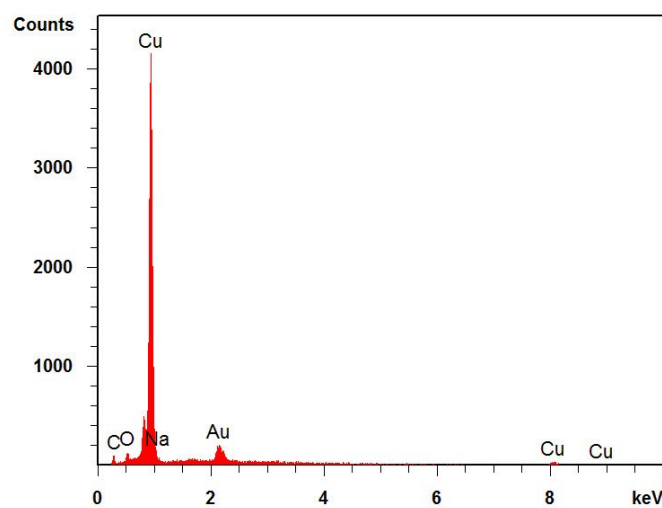
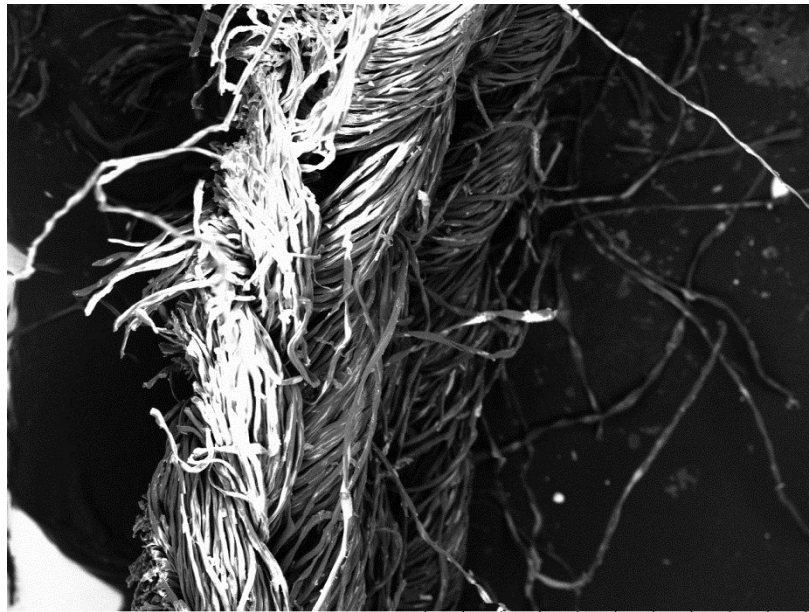


Fig. S2 Energy Dispersive X-Ray Spectroscopy(EDS) analysis of the as-made copper cotton.



TM3030Plus0102 N D7.6 x80 1 mm

Fig. S3 Examination of single yarn pulled from copper-coated fabric sample

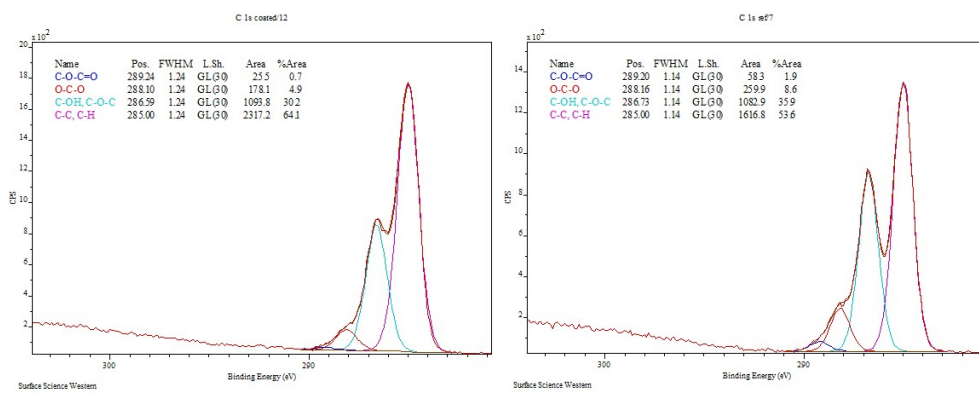


Fig. S4 C1s XPS spectra of(left) coated cotton fabric,(right) pristine cotton fabric



Fig. S5 Two cotton fabric samples after ELD process; Left: without surface treatment; Right: with surface treatment



Fig. S6

Sn-Cu cotton fabric sample

Table S1 The major elemental analysis of pristine cotton fabric, coated cotton fabric by XPS

	C(wt.%)	O(wt%)	N(wt%)
Cotton fabric	65.6%	28.9%	0%
Coated cotton	69.2%	23.7%	1.9%

Table S2 The major element analysis at the intersection of cotton fabric sample after absorbing silver ions

	C(wt.%)	O(wt.%)	Ag(wt.%)
Cotton fabric before ELD	3.74%	43.73%	52.53%