Response to Reviewer #2:

**Comment 1:** In the introduction part, the authors should add the following suggested references, regarding conductive fibres and yarns. "Polymer Interface Molecular Engineering for E-Textiles." Polymers 10.6 (2018): 573. And "Mussel -Inspired Flexible, Durable, and Conductive Fibers Manufacturing for Finger -Monitoring Sensors." Advanced Materials Interfaces (2018): 1801547.

**Response:** Thanks for your suggestion, we have added the references in the manuscript, which make the introduction more complete.


**Comment 2:** Dopamine which mimics the adhesive chemistry of mussel plaque detachment allows the spontaneous deposition of nanoscale-thin, surface-adherent films of poly(dopamine) (PDA) on virtually all material surfaces by simple dip-coating in an alkaline solution. The alkaline environment should adversely affect the Ag coating on the PP fibres, resulting in a decrease of conductivity. The morphology change of Ag coating after PDA coating should be examined.

**Response:** Thanks for your question, as for the decrease of conductivity, we think it is the PDA coating that on the surface of Ag hinder the electronic transmission. After all, Ag has stable physical and chemical properties, when treated with dopamine, the alkaline environment is about 8.5, which has little influence on the conductivity.

Please refer to Page 14:

“It is obvious that the sheet resistance increased with the increasing treatment time of dopamine because of the obstruction of electronic transmission of the PDA coating.”

After the coating of PDA, in the macro level, the color of the Ag coating has changed with the treatment time of dopamine which was shown in Fig 10(a)(c). In
microscopic level, the Ag coating was covered with PDA particles, we can see from Fig 6 in the manuscript.

**Comment 3:** For analysing electromagnetic interference shielding effectiveness with varying dopamine treatment time, the treatment time of 5 min should be needed because of the rapid reaction of dopamine in the alkaline solution.

**Response:** As Reviewer suggested that we have conducted the experiment which the treatment time of 5 min, and its electromagnetic interference shielding effectiveness is \( \sim 26 \) dB which is almost the same as the single Ag-coated fabric. However, the fabric treated for 5 minutes has poor EMI SE after Na\(_2\)S and washing treatment, which are 10 and 2 dB, respectively. 5 min treatment time of dopamine make little difference on improving the stability and durability compared with single Ag coated fabric, so we haven’t put the treatment time into the manuscript.