

Supporting Information for

Towards Flexible and Wearable Embroidered Supercapacitors from Cobalt Phosphides Decorated Conductive Fibers

Jianfeng Wen¹, Bingang Xu^{1,*}, Jinyun Zhou¹

¹Nanotechnology Center, Institute of Textiles and Clothing, the Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong, China

*Corresponding author. E-mail: tcxubg@polyu.edu.hk (Bingang Xu)

S1 The Interdigital Patterns



Fig. S1 The predesigned specifications and dimensions of the in-plane SCs in mm

S2 SEM Images of Nickel Layers at Different Electrodepositing Voltages

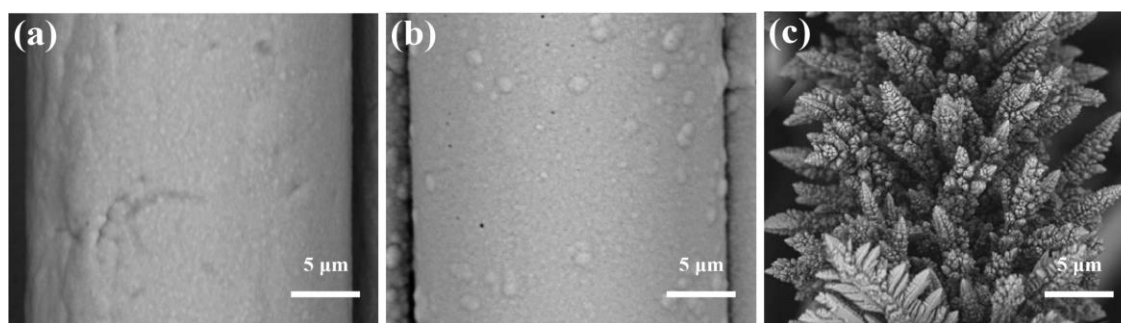
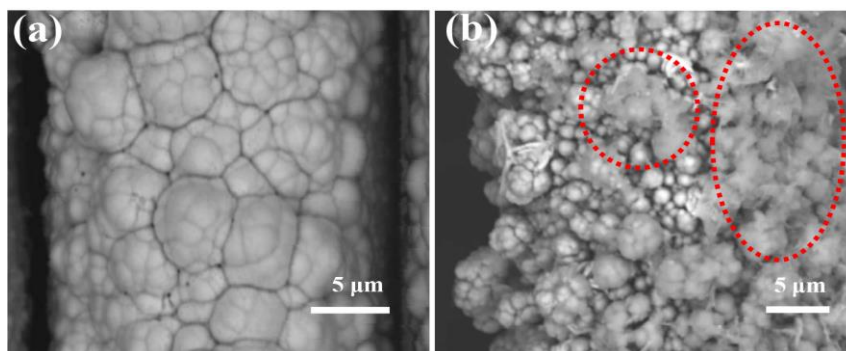
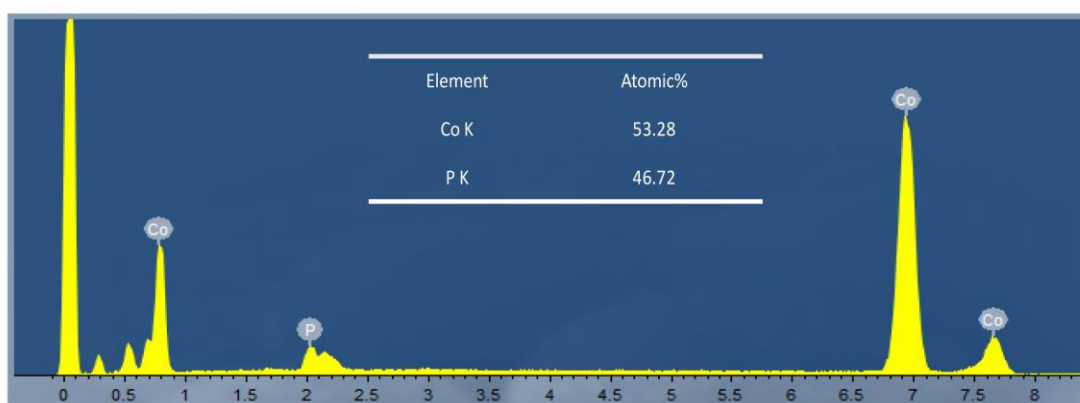
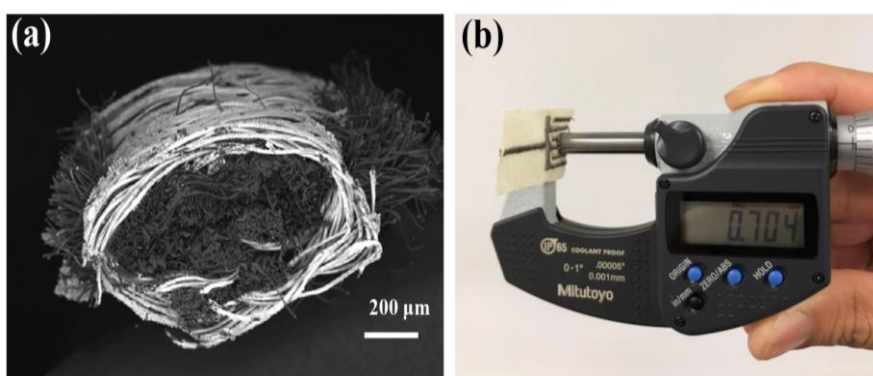


Fig. S2 SEM images of smooth nickel layer at **a** 1 V, **b** 1.2 V, **c** dendrite nickel layer at 1.6 V

S3 SEM Images of CoP@Ni NTAs@SE at Different Electrodepositing Voltages**Fig. S3** SEM images of CoP obtained at **a** 0.9 V, **b** 1.3 V**S4 Images of CoP@Ni NTAs@SE Cross Section****Fig. S4** The EDS spectrum of CoP@Ni NTAs@SE**S5 Images of CoP@Ni NTAs@SE Cross Section****Fig. S5** **a** SEM cross section image, **b** Real photo of CoP@Ni NTAs@SE

S6 Characterization of Raman and FTIR

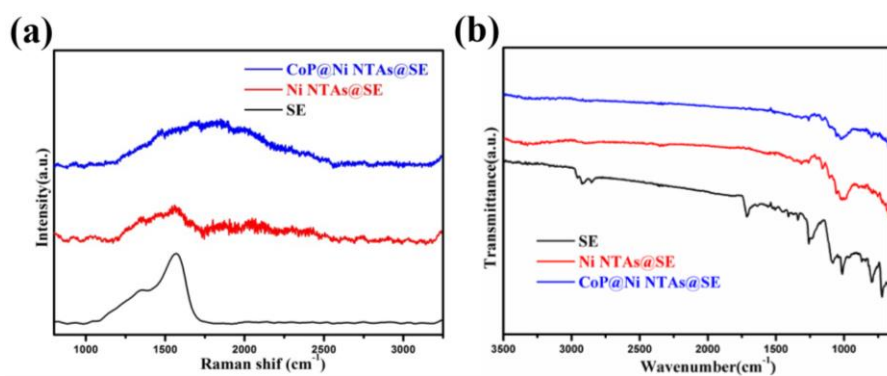


Fig. S6 a Raman spectrums and **b** FTIR spectrums of SE, Ni NTAs@SE, and CoP@Ni NTAs@SE