Electronic Supplementary Material (ESI) for Nanoscale

SUPPORTING INFORMATION

A Comparative Study of Supercapacitive Performances of Nickel Cobalt Layered Double Hydroxides coated on ZnO Nanostructured Arrays on Textile Fibre as Electrodes for Wearable Energy Storage Devices

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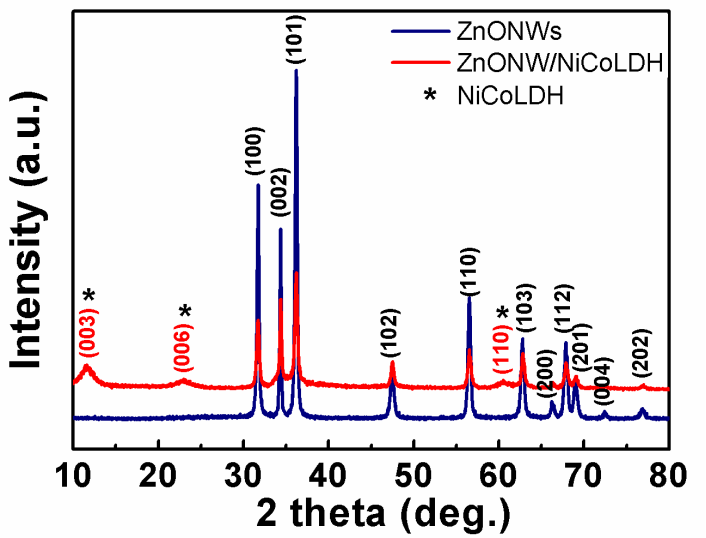

Fig. S1. XRD patterns of ZnONWs and ZnONW/NiCoLDH hybrid.

The pattern shows that ZnONW/NiCoLDH hybrid arrays have almost the same peak positions with ZnONF/NiCoLDH counterpart.

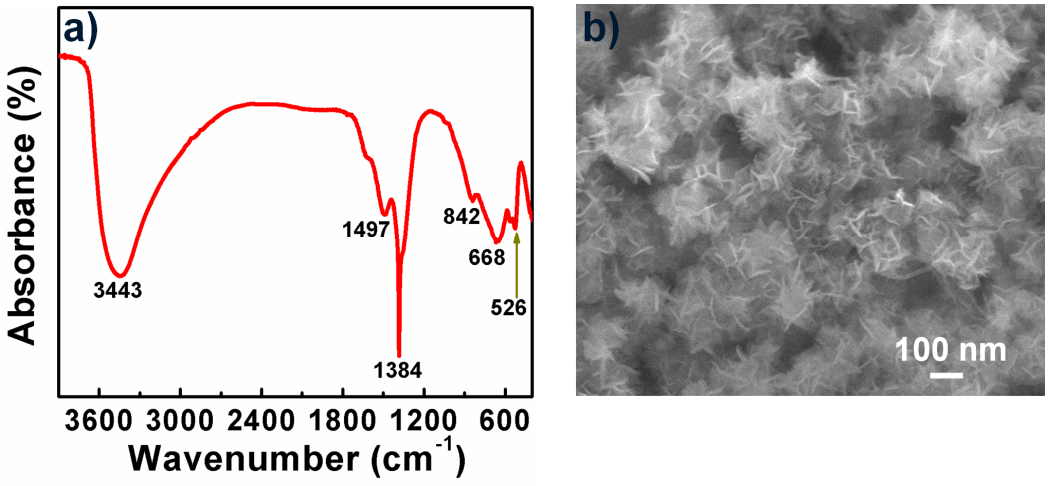

Fig. S2: (a) FTIR spectrum and (b) FESEM image of NiCoLDH.

The FTIR results further support the formation of NiCoLDH, in which the NO_3^- ions have been intercalated into interlayer of Ni-Co hydroxides. The FESEM micrograph of the pristine NiCoLDH shows the flower-like morphology.

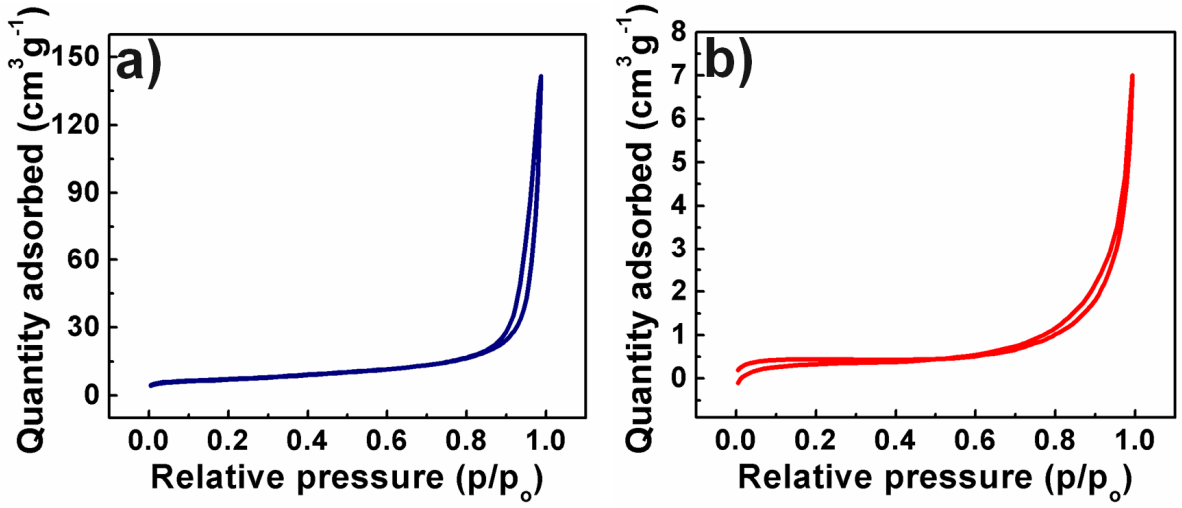

Fig. S3: Nitrogen sorption isotherms for ZnONFs and ZnONWs.

According to Nitrogen sorption isotherms, ZnONFs have surface areas of (25.18 m^2 g^{-1}), which is 14 times higher than the ZnONWs (1.75 m^2 g^{-1}).

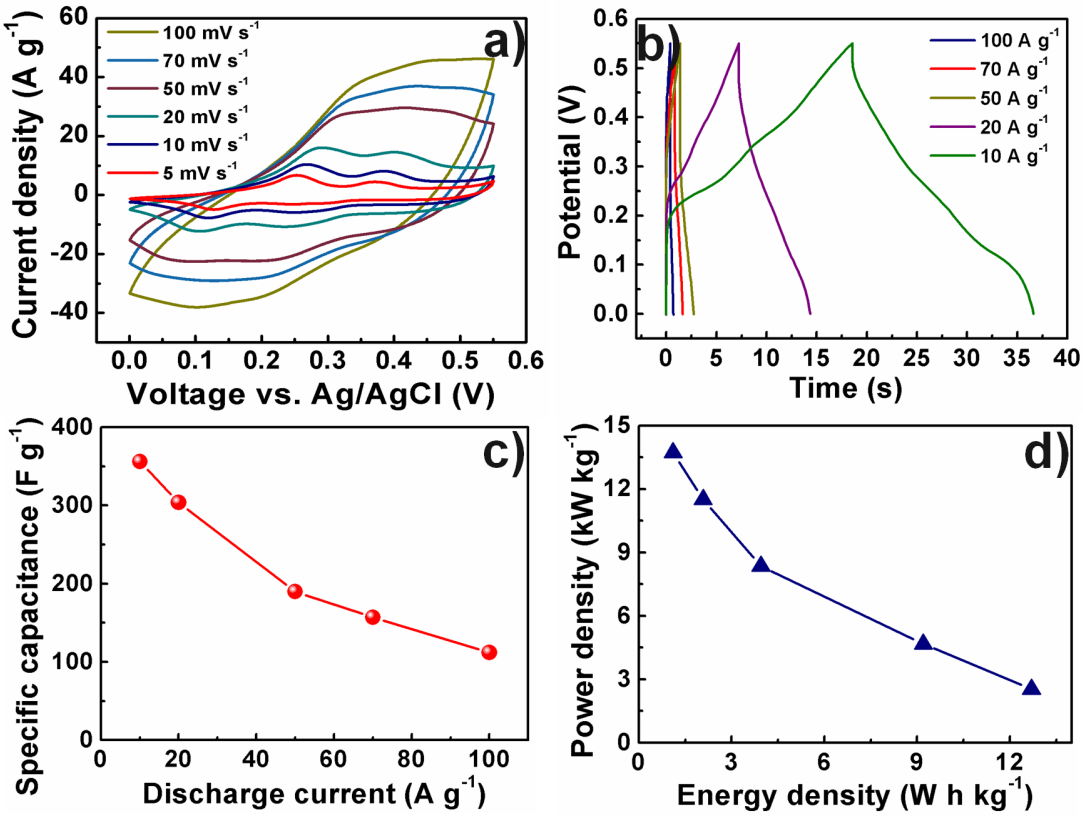

Fig. S4: Supercapacitive performance of pristine NiCoLDH powder (a) Cyclicvoltammograms curves at different scan rates. (b) Typical galvanostatic charge/discharge curves of at various current densities. (c) Variation of specific capacitance at different current densities, and (d) Ragone chart obtained from discharge curve's measurements.