

Supporting Information.

Holey Nickel Hydroxide Nanosheets for Wearable Solid-State Fiber-Supercapacitor

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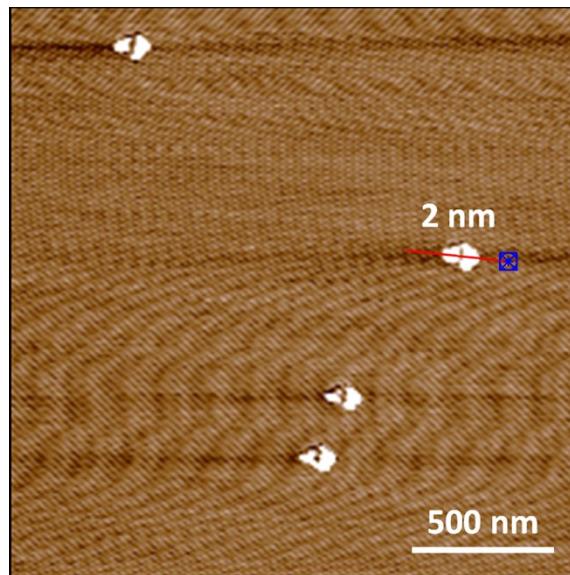


Fig. S1. AFM image of Ni(OH)_2 nanosheets.

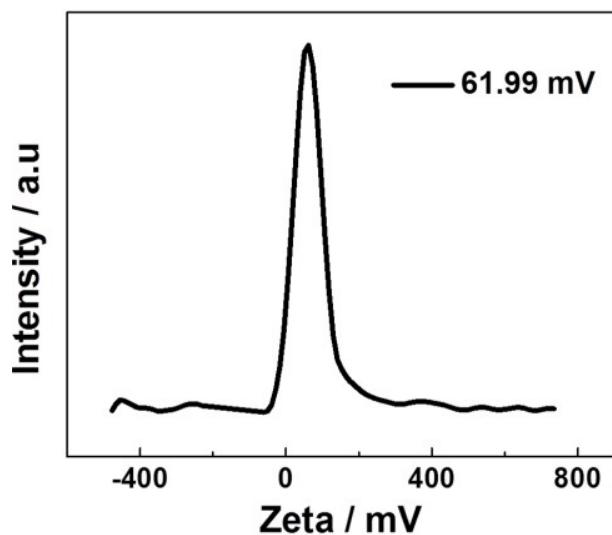


Fig. S2. The Zeta potential of Ni(OH)_2 nanosheets that are uniformly dispersed in ethanol at a concentration of 1 mg mL^{-1} .

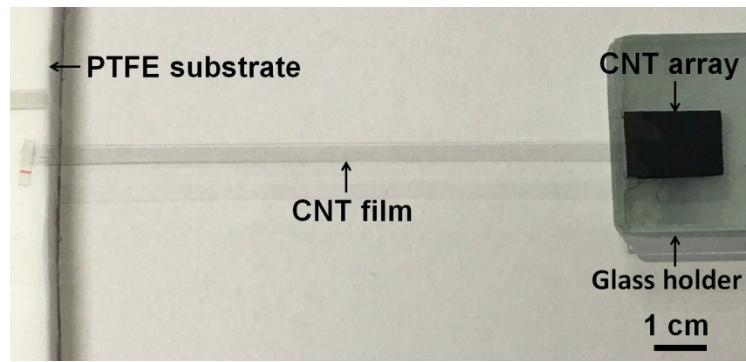


Fig. S3. Photograph of a well-aligned CNT film pulled out from vertical CNT array.



Fig. S4. Optical image of a knotted Ni(OH)₂/CNT fiber.

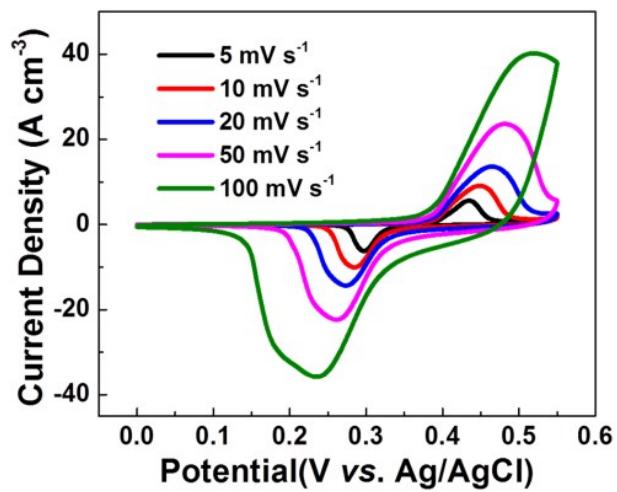


Fig. S5. CV curves of Ni(OH)₂/CNT hybrid fiber electrode (40 wt%) at different scan rates ranging from 5 to 100 mV s⁻¹ in 1 M KOH.

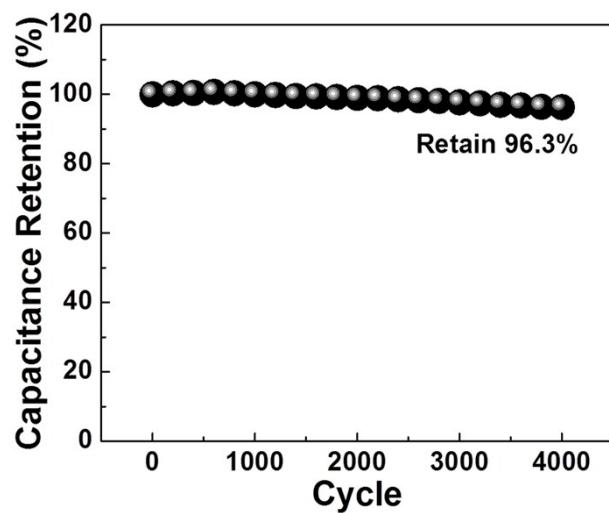


Fig. S6. Capacitance retention of the $\text{Ni(OH}_2\text{)}/\text{CNT}$ fiber electrode after 4000 charge-discharge cycles at a current density of 5.0 A cm^{-3} .

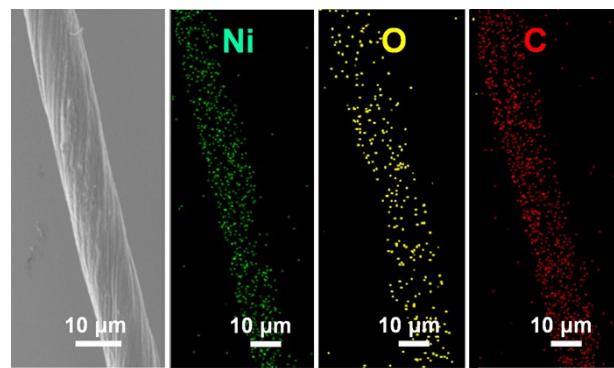


Fig. S7. SEM image and EDS mapping of $\text{Ni(OH)}_2/\text{CNT}$ fiber after 4000 charge-discharge cycles.

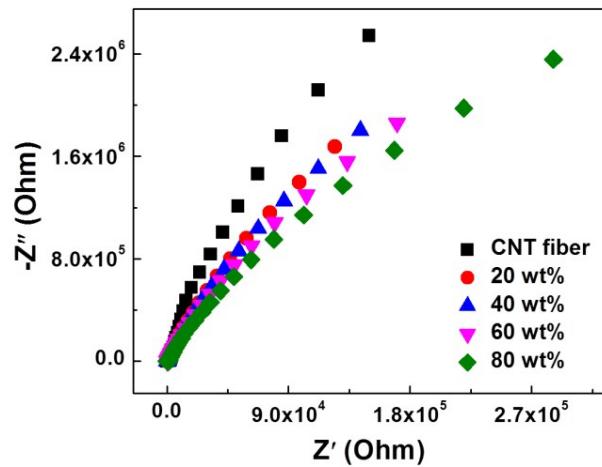


Fig. S8. EIS plots of bare CNT fiber and $\text{Ni(OH)}_2/\text{CNT}$ hybrid fiber electrodes with different loading amounts of holey Ni(OH)_2 nanosheets (20, 40, 60, and 80 wt%).

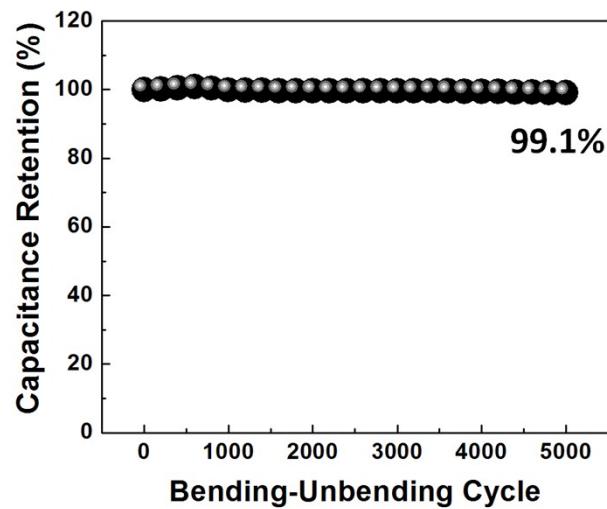


Fig. S9. Capacitance retention of the hybrid supercapacitor after 5000 bending-unbending cycles at a current density of 0.8 A cm^{-3} .

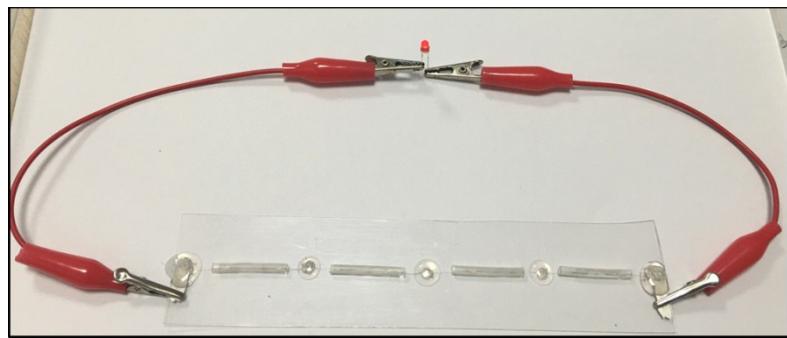


Fig. S10. A LED can be lightened up by four hybrid supercapacitors connected in series.