

## Supporting Information

# High-Performance, Ultra-Flexible and Transparent Embedded Metallic Mesh Electrodes by Selective Electrodeposition for All-solid-state Supercapacitor Applications

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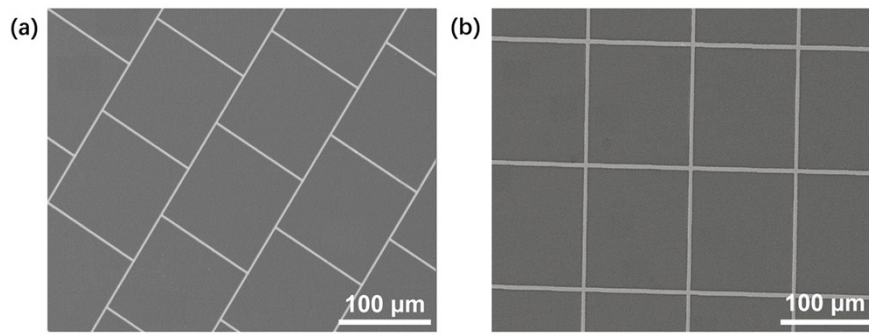


Fig. S1 Top-view SEM images of embedded Ni mesh TCEs with (a) brick wall and (b) rectangle arrangements.

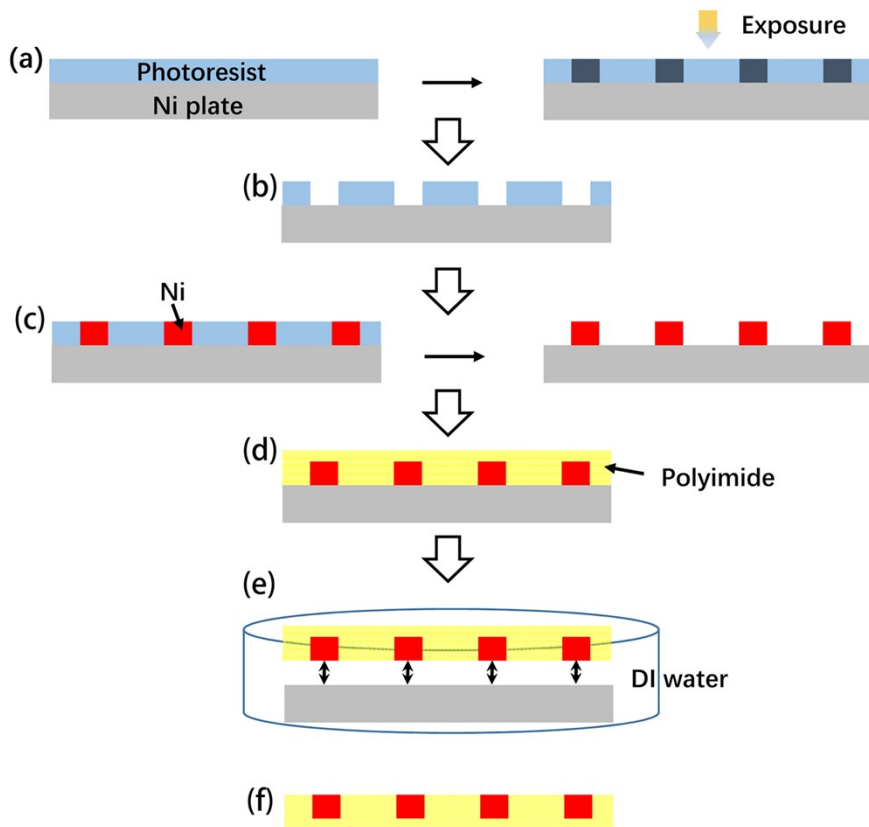


Fig. S2 Schematic illustration of the fabrication procedure of the embedded Ni mesh TCEs on ultra-thin flexible polyimide (PI): (a) Spin-coating photoresist on Ni plates and generate metallic mesh patterns by laser direct writing system, (b) developing, (c) electrodepositing Ni into the patterned micro trenches and remove the photoresist, (d) fabricate PI films on Ni mesh by solution process, (e) release the embedded Ni mesh TCEs/PI from Ni plate by immersing it on DI water and (f) obtain the embedded Ni mesh TCEs on PI.

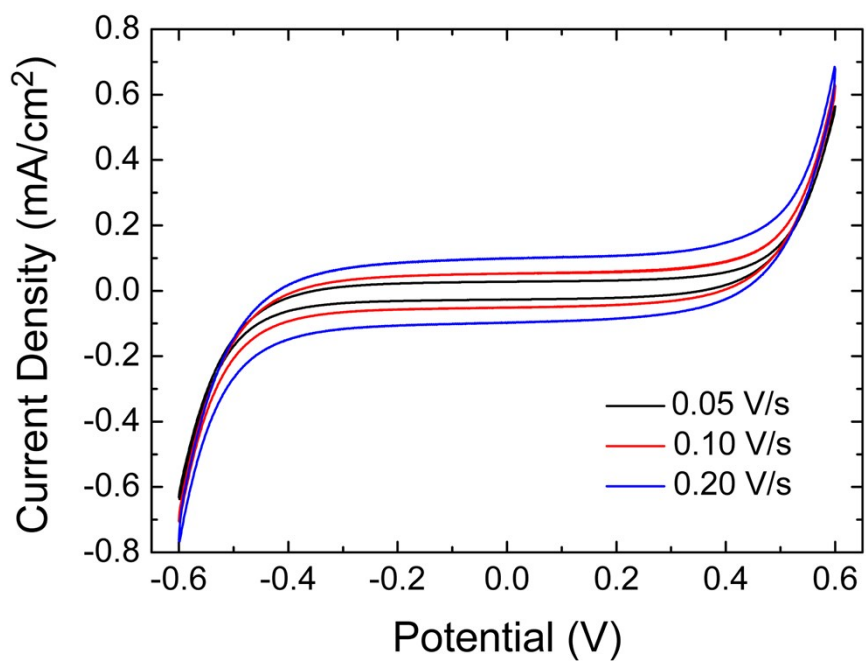


Fig. S3 CV curves of the supercapacitor device at small scan rates of 0.05, 0.1 and 0.2 V/s

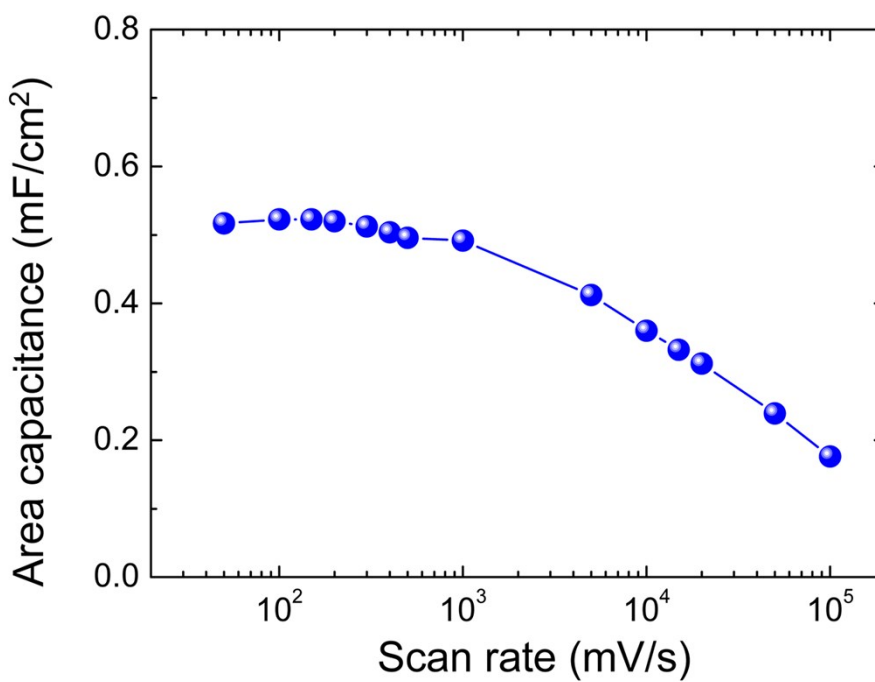


Fig. S4 Area capacitance of the supercapacitor device measured as a function of scan rate.