

Supplementary Information

for

ZIF-derived nitrogen-doped carbon/3D graphene frameworks for all-solid-state supercapacitors

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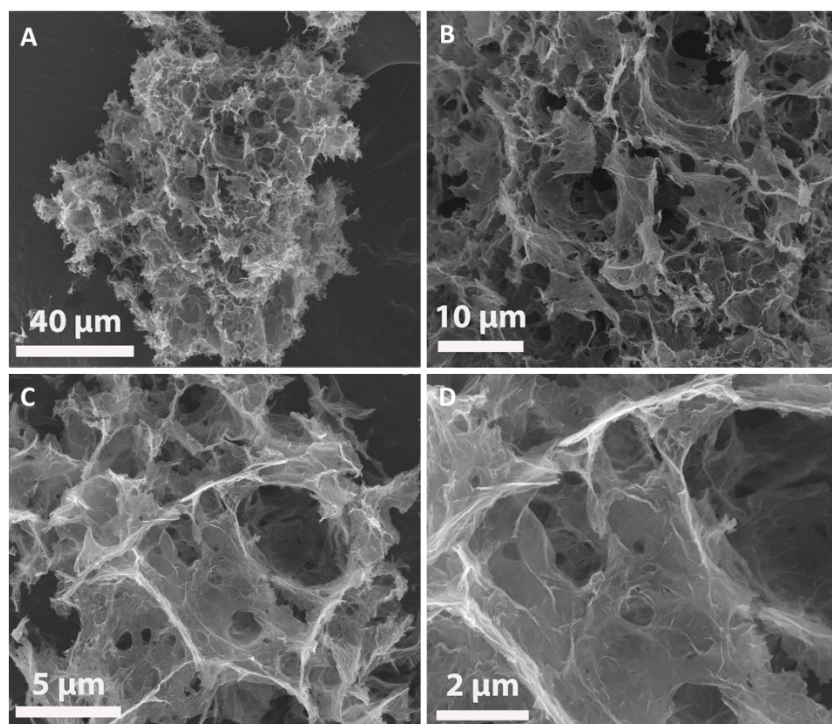


Fig. S1. SEM images of graphene aerogels (GA)

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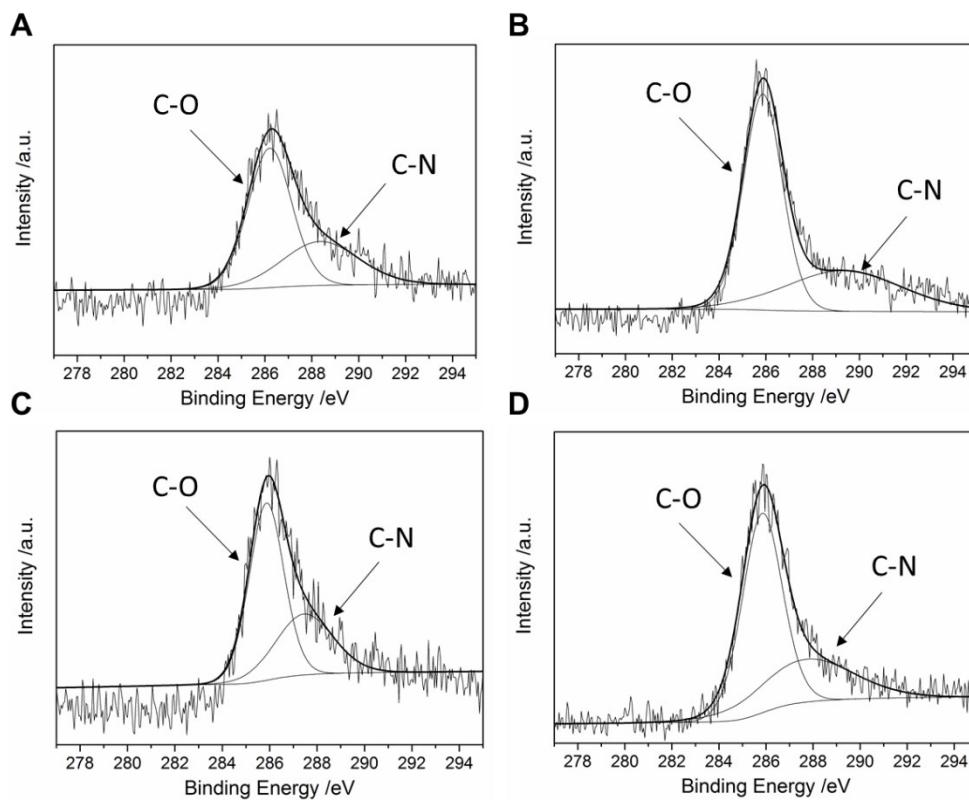


Fig. S2. XPS spectra of C 1s peak of a) CZIF-8-E, b) GA@CZIF-8-E, c) CZIF-67-E and d) GA@CZIF-67-E.

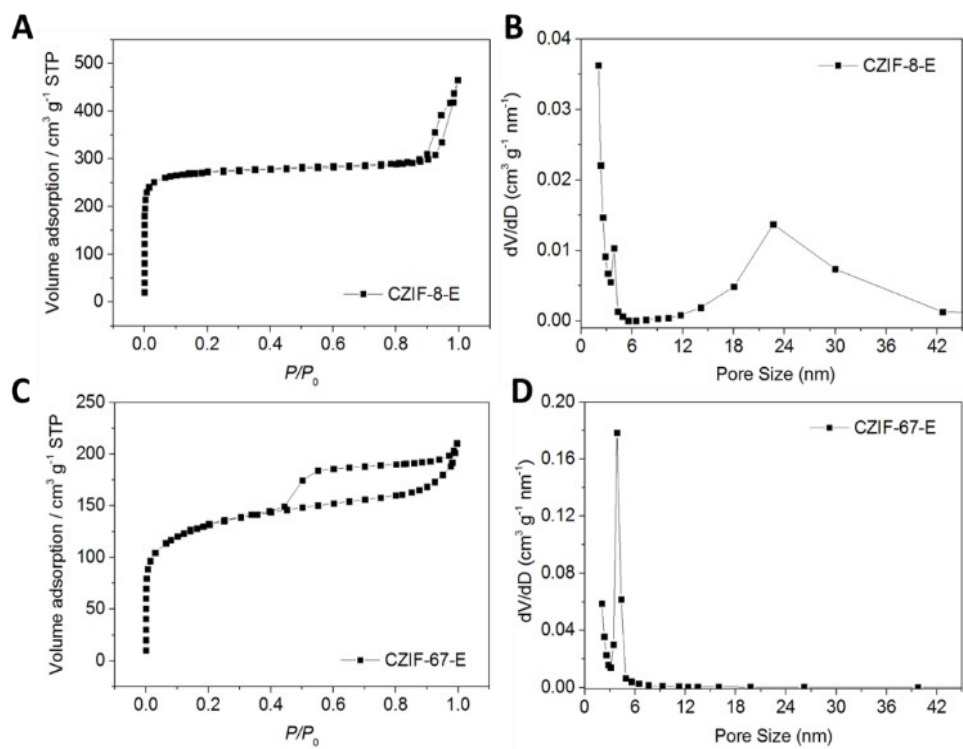


Fig. S3. N_2 adsorption-desorption isotherms of (a) CZIF-8-E and (c) CZIF-67-E. Pore distribution of (b) CZIF-8-E and (d) CZIF-67-E.

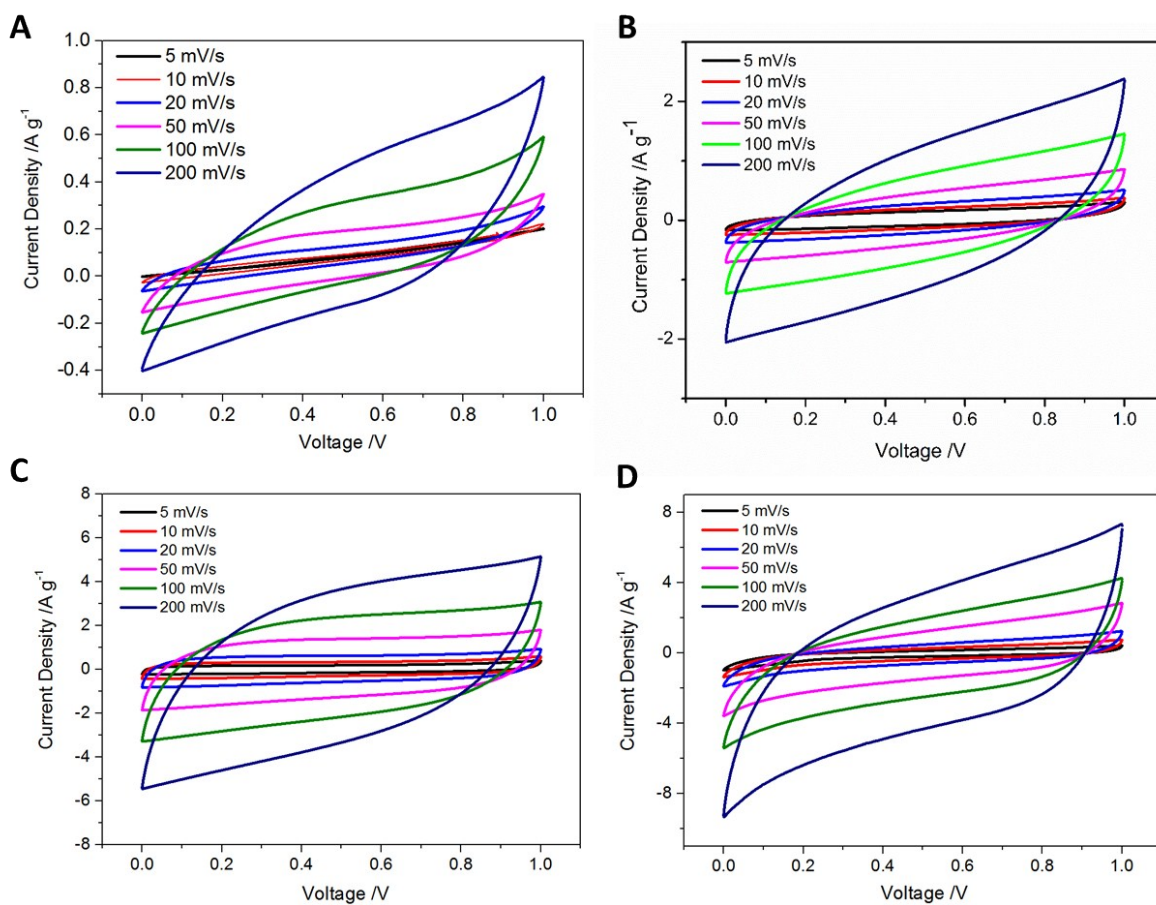


Fig. S4. Electrochemical performance of ASSSs. CVs of (a) CZIF-8-E, (b) CZIF-67-E, (c) GA@CZIF-8-E, and (d) GA@CZIF-67-E based on two-electrode mass measured at different scan rates of 5, 10, 20, 50, 100 and 200 mV s⁻¹.

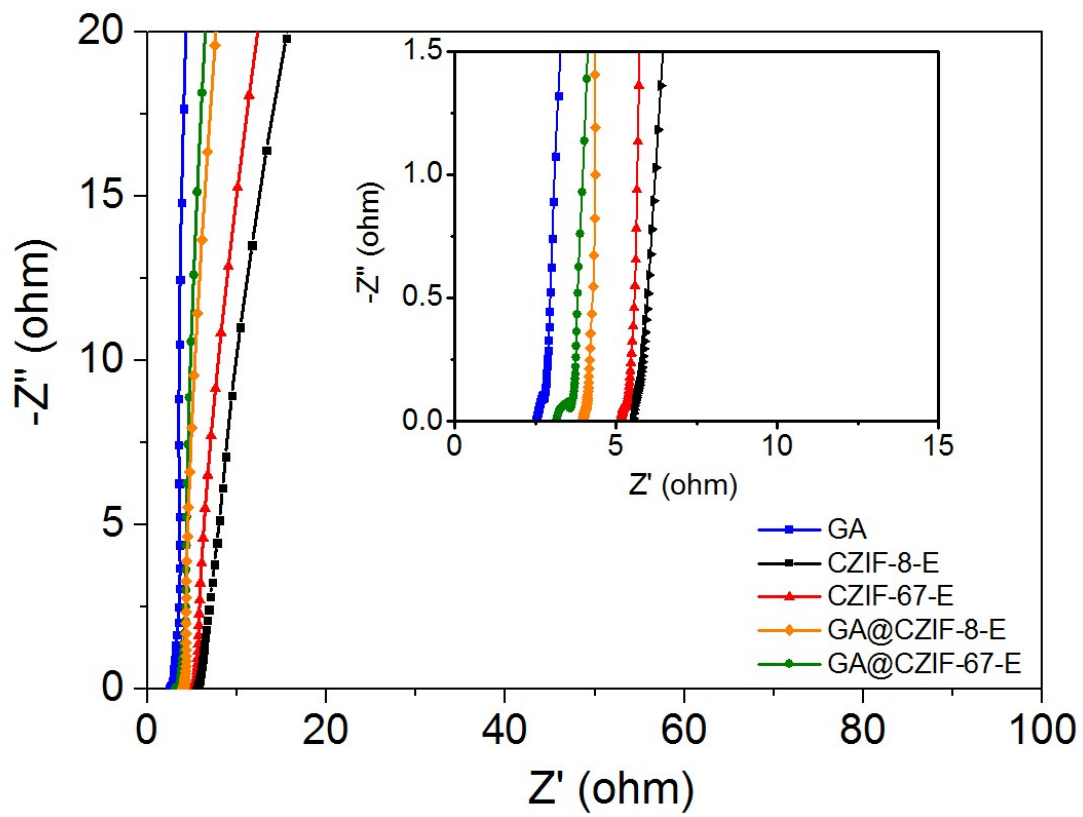


Fig. S5. Nyquist plots of the experimental impedance data for GA, CZIF-8-E, CZIF-67-E, GA@CZIF-8-E, and GA@CZIF-67-E; inset is a zoomed-in view of the high-frequency region in the Nyquist plots.

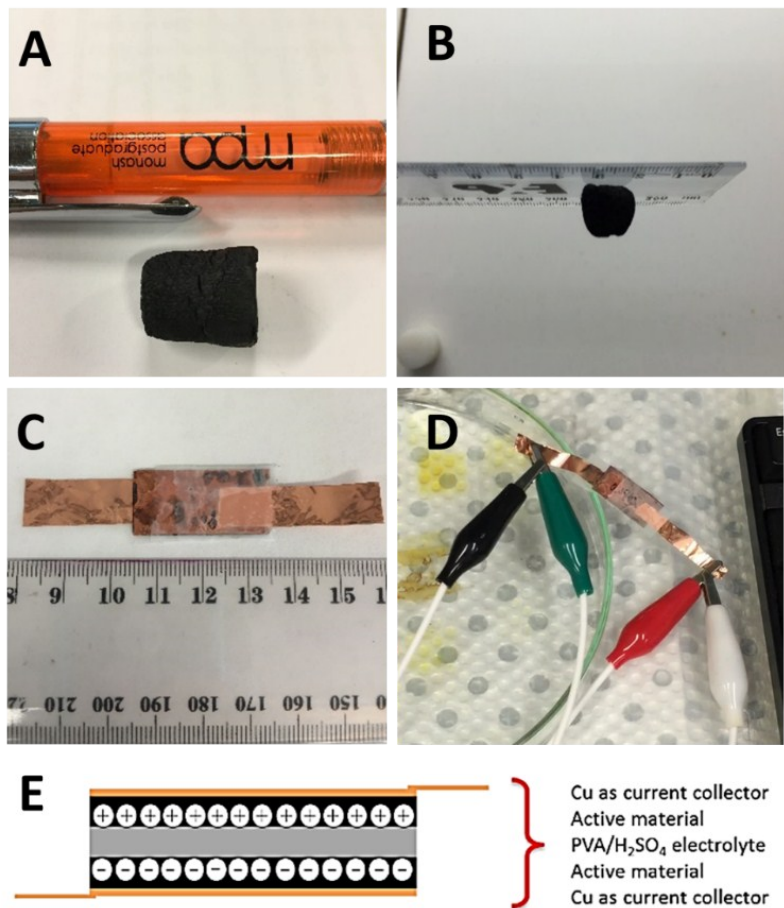


Fig. S6. Photo images of (A-D) GA@CZIF-67-E, and a schematic diagram (E) of all-solid-state supercapacitors.