

Large Areal Capacitance Structural Supercapacitor with 3D rGO@MnO₂ Foam Electrode and Polyacrylic Acid-Portland Cement-KOH Electrolyte

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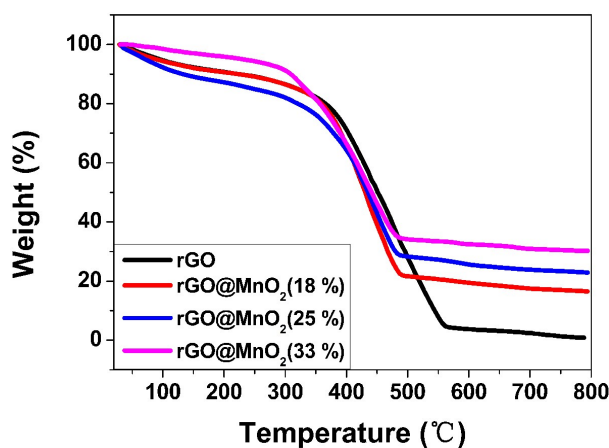


Fig. S1 TGA curves of rGO and rGO@MnO₂ foams with various MnO₂ nanosheets mass loadings.

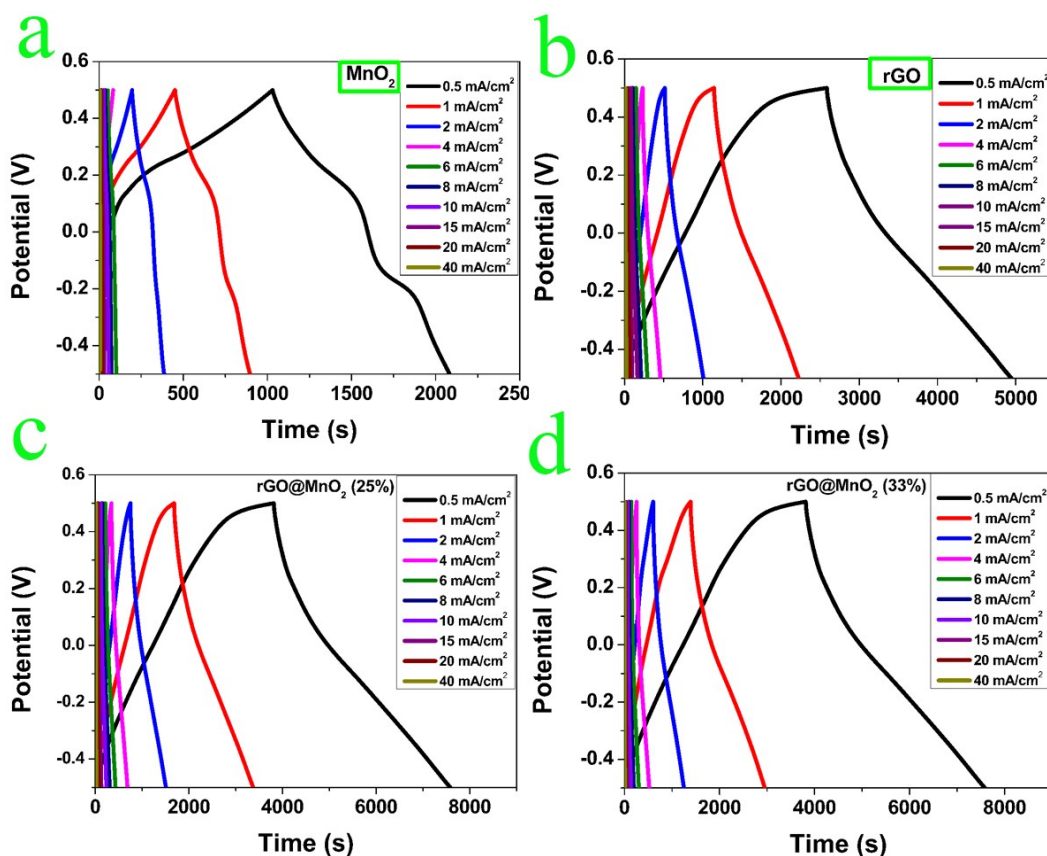


Fig. S2 GCD curves at different current densities for MnO₂, rGO, rGO@MnO₂ (25%) and rGO@MnO₂ (33%) electrodes.

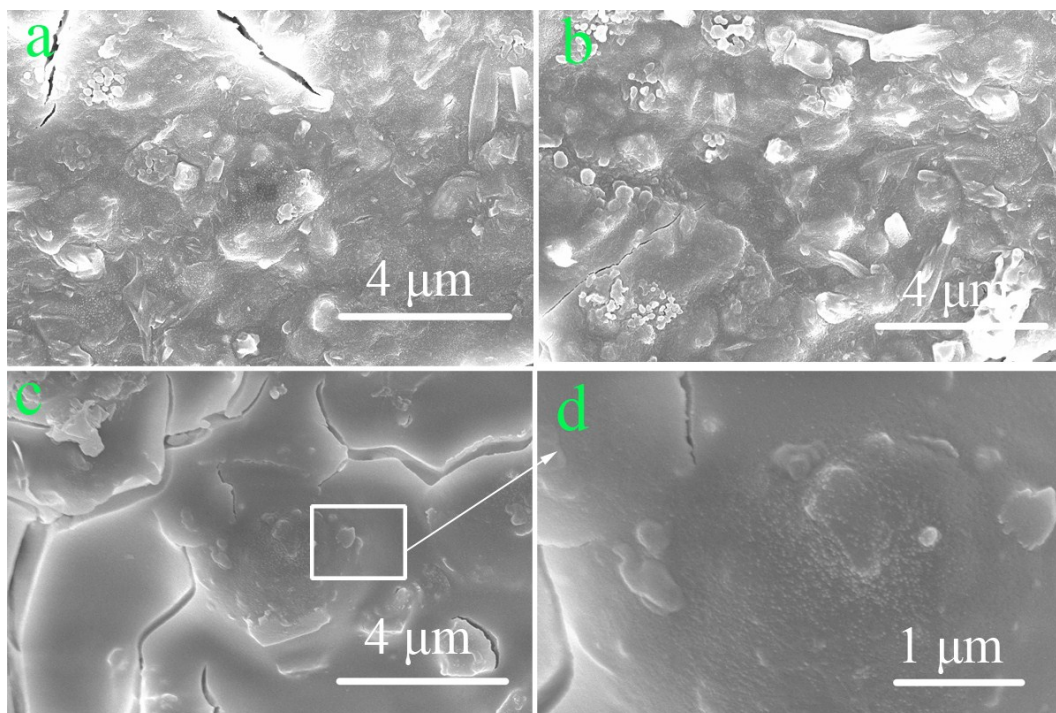


Fig. S3 SEM images of PAA-Portland cement-KOH electrolytes with various PAA contents. (a) 2 wt%, (b) 4 wt%, (c) 8 wt% (low-magnification), (d) 8wt% (high-magnification).

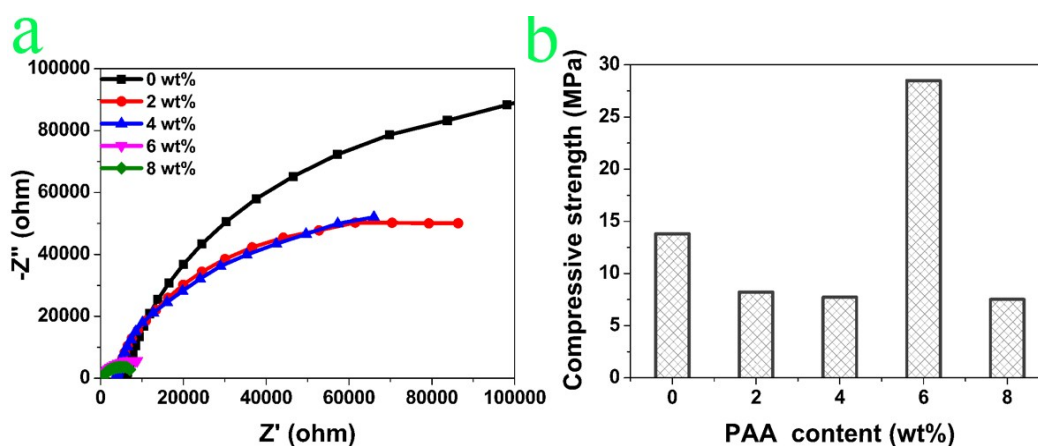


Fig. S4 (a) EIS, (b) Compressive strength of PAA-Portland cement-KOH electrolytes with various PAA contents.

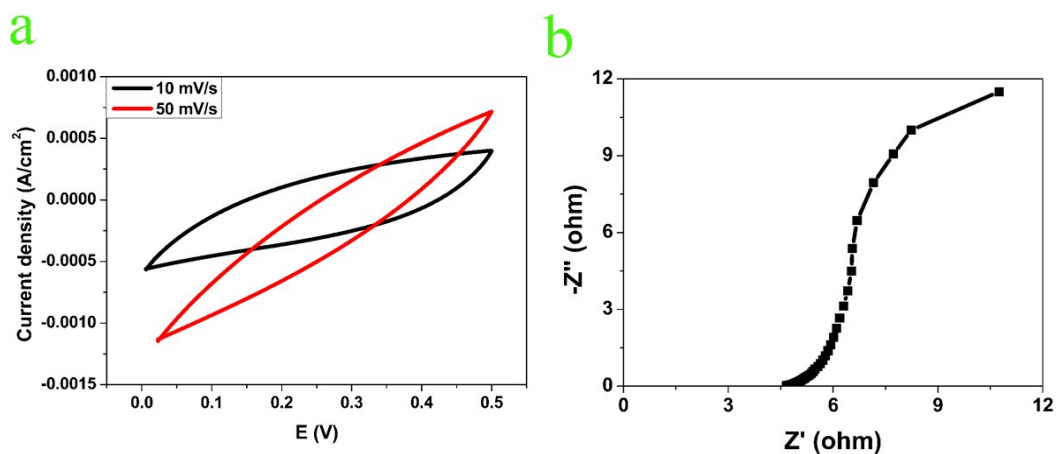


Fig. S5 (a) CV curves and (b) EIS curve of the structural supercapacitor cell.