Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supporting Information

Interconnected Three-Dimensional V_2O_5/Polypyrrole Network Nanostructures for High Performance Solid-State Supercapacitors

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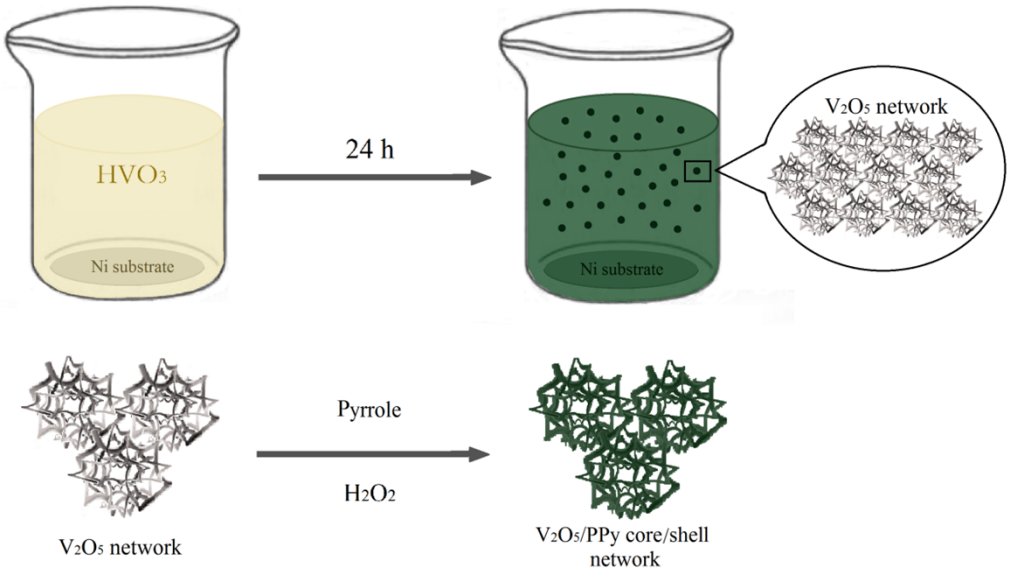

Fig. S1 Schematics of the fabrication process of V_2O_5/PPy core/shell network.

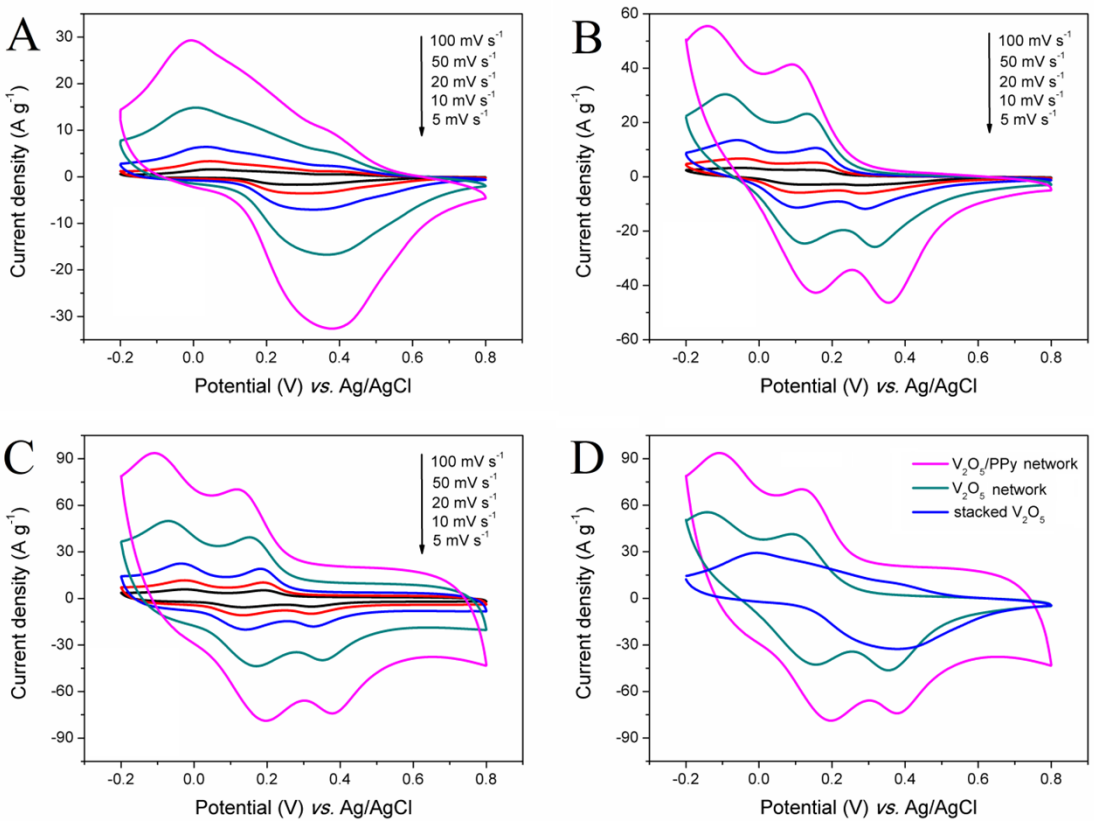

Fig. S2 CV curves of the prepared (A) stacked V_2O_5, (B) V_2O_5 network, and (C) V_2O_5/PPy core/shell network electrode in the potential range of −0.2-0.8 V at scan rates of 100, 50, 20, 10, 5 mV s^{-1}. (D) CV curves of three different materials at a scan rate of 100 mV s^{-1}

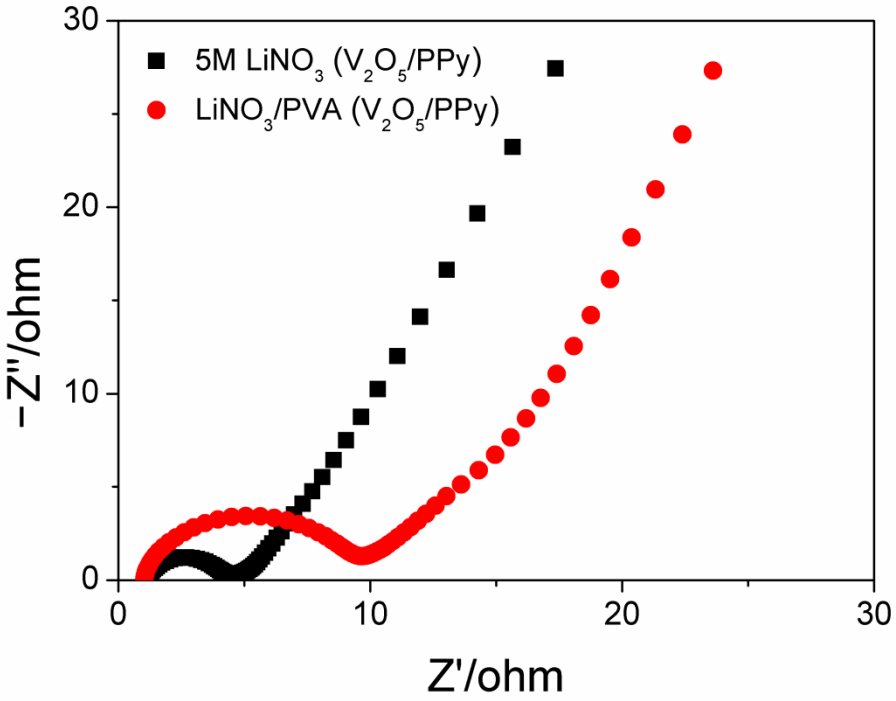

Fig. S3 Nyquist plots of the V_2O_5/PPy in 5 M $LiNO_3$ aqueous solution and $LiNO_3$/PVA gel electrolyte, respectively.

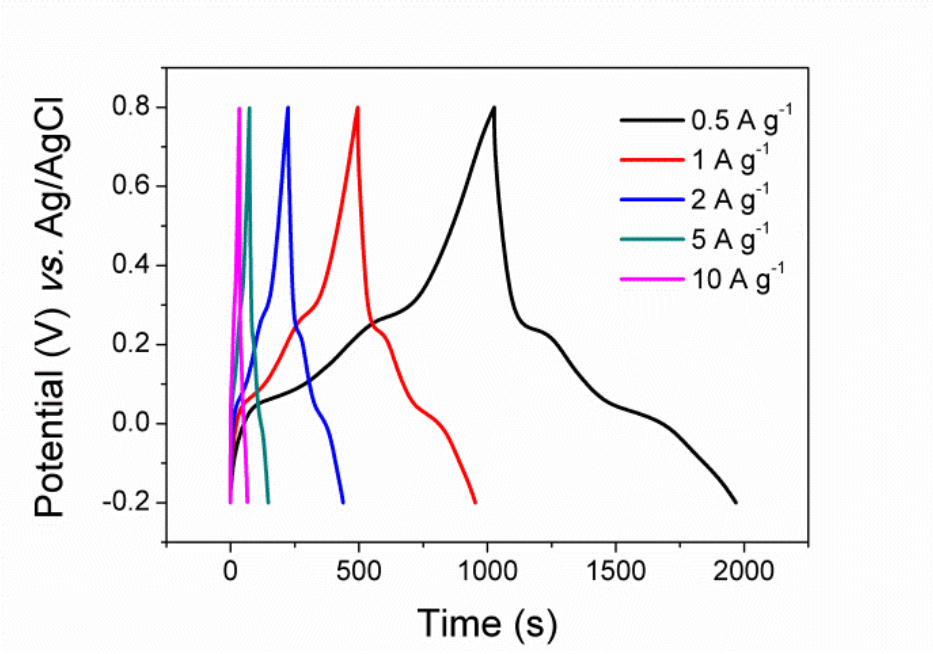

Fig. S4 Galvanostatic charge/discharge curves of the prepared V_2O_5/PPy core/shell network electrode with a mass loading of 1 mg cm^{-2} at current densities of 0.5, 1, 2, 5, 10 A g^{-1}.

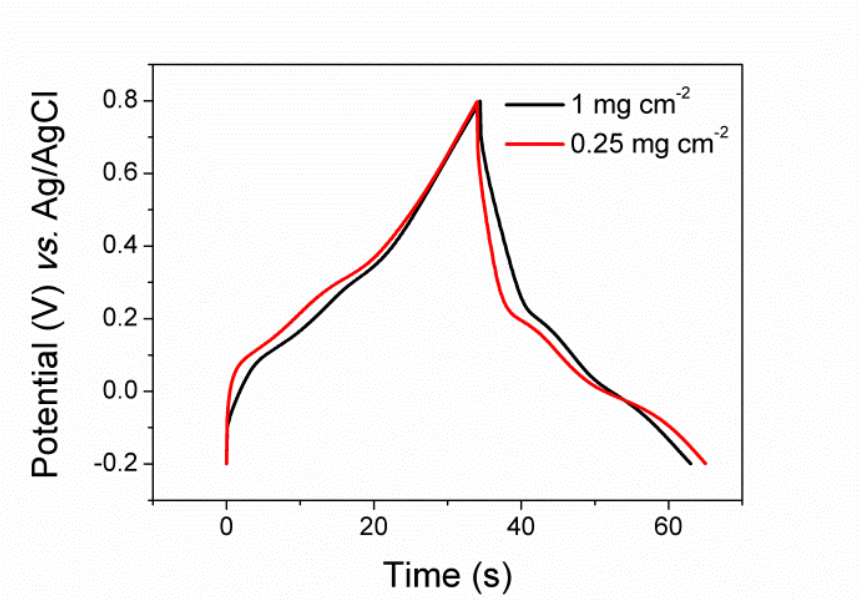

Fig. S5 Galvanostatic charge/discharge curves of the prepared V_2O_5/PPy core/shell network electrode with 1 mg cm^{-2} and 0.25 mg cm^{-2}.