

Three dimensional macroporous networks of birnessite manganese oxide assembled by ultrathin nanosheets with enhanced Li-ion battery performances

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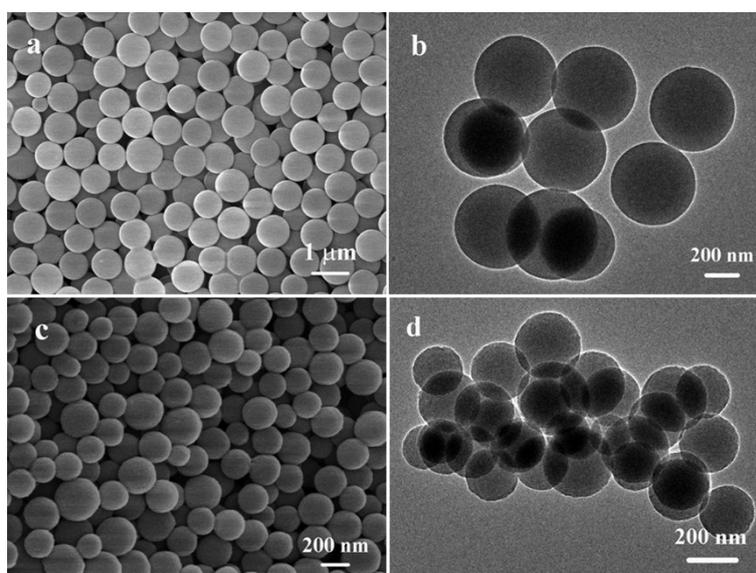


Figure S1 SEM and TEM images of the used carbon spheres with average diameters of (a, b) 500 nm and (c, d) 200 nm.

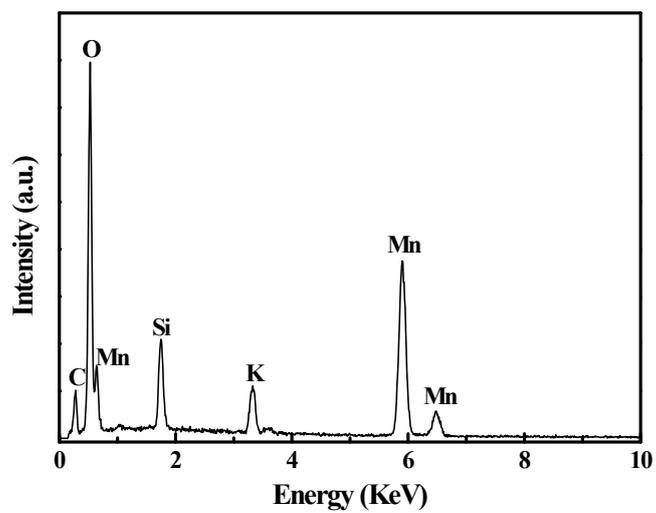


Figure S2 Energy dispersive spectrum (EDS) of ultrathin MnO₂ nanosheet

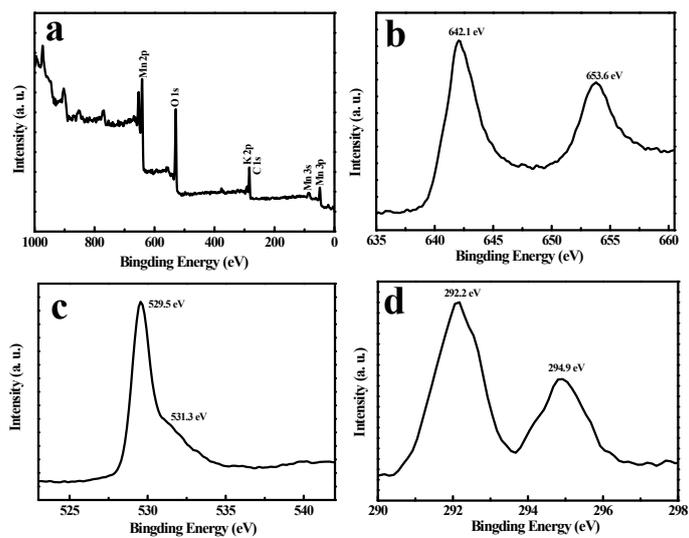


Figure S3 XPS spectra of ultrathin nanosheet MnO₂: (a) survey spectrum; (b) high resolution XPS spectrum for Mn 2p; (c) high resolution XPS spectrum for O 1s; and (d) high resolution XPS spectrum for K 2p

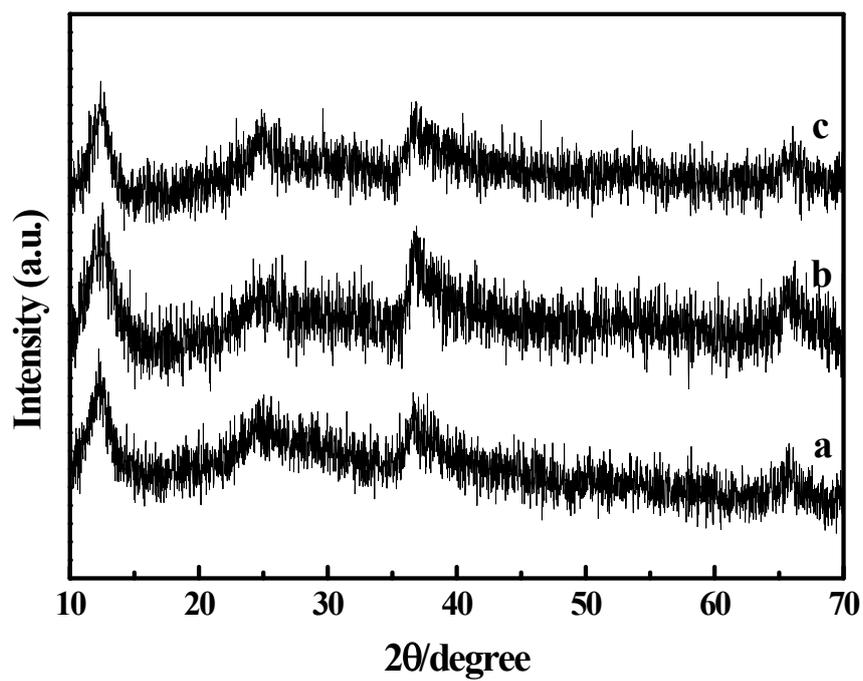


Figure S4 XRD patterns of (a) C@MnO₂ yolk-shell structure; (b) hollow MnO₂ spheres composed of ultrathin birnessite nanosheets and (c) 3D honeycomb-like macroporous networks assembled by ultrathin birnessite nanosheets.

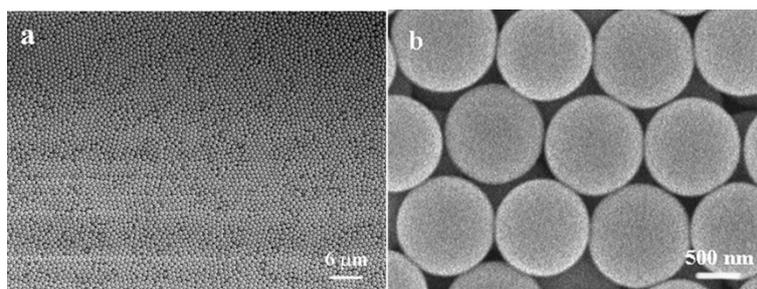


Figure S5 FESEM image of the carbon-microsphere

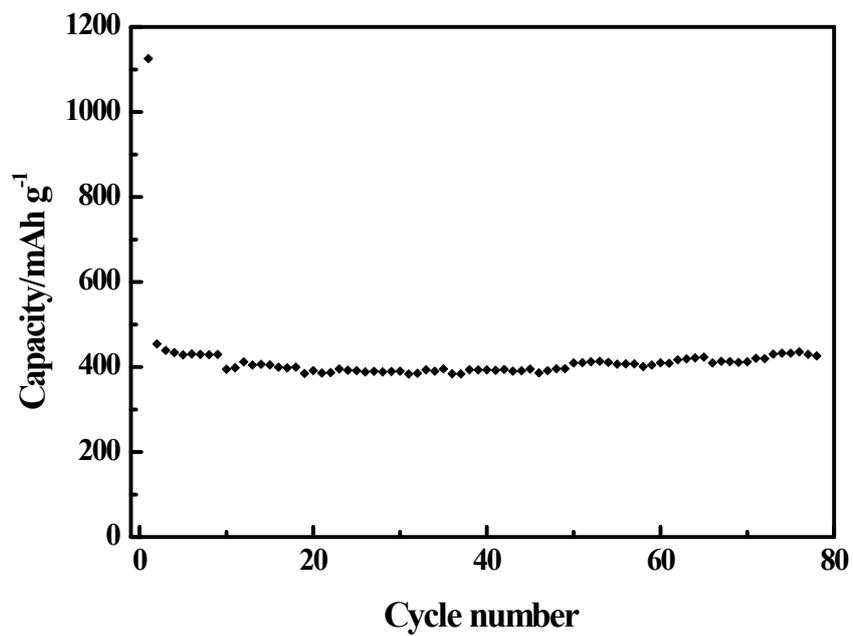


Figure S6 Cycling performances of 3D macroporous structures composed of ultrathin nanosheets at current rate of 400 mA·g⁻¹.