Electronic Supplementary Material (ESI) for Nanoscale.

Controlled synthesis of hollow C@TiO_2@MoS_2 hierarchical nanospheres for high-performance lithium-ion batteries

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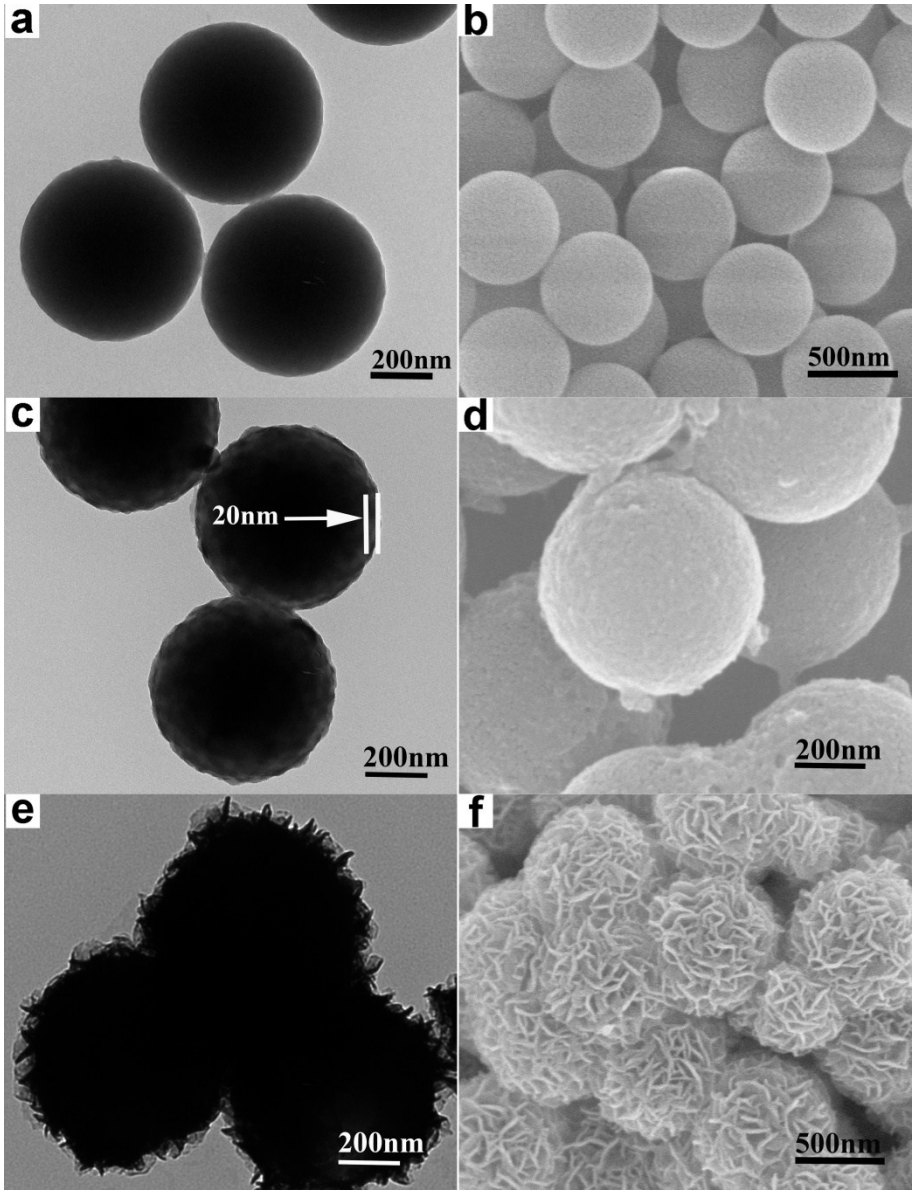

Figure S1. TEM and SEM images of (a-b) polystyrene spheres (PS); (c-d) PS@TiO_2; (e-f) PS@TiO_2@MoS_2.

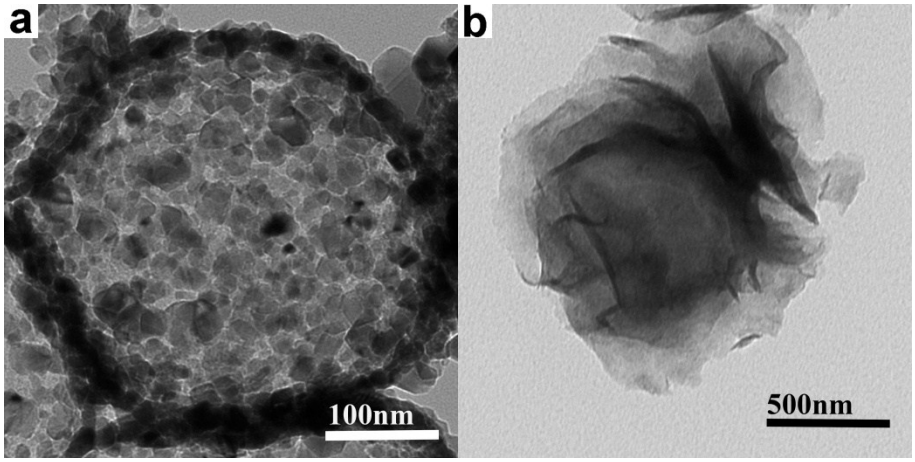

Figure S2. TEM images of (a) C@TiO_2; (b) pure MoS_2.

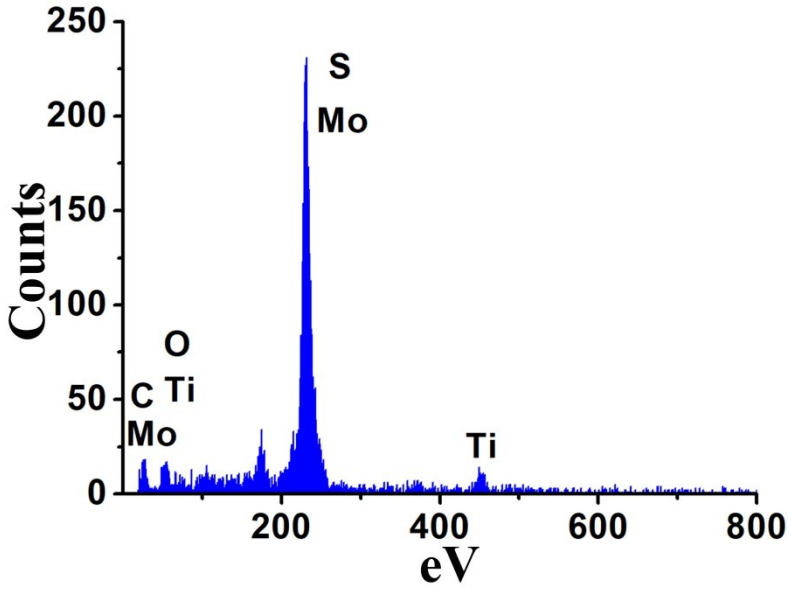

Figure S3. EDX spectrum of the C@TiO_2@MoS_2 sample.

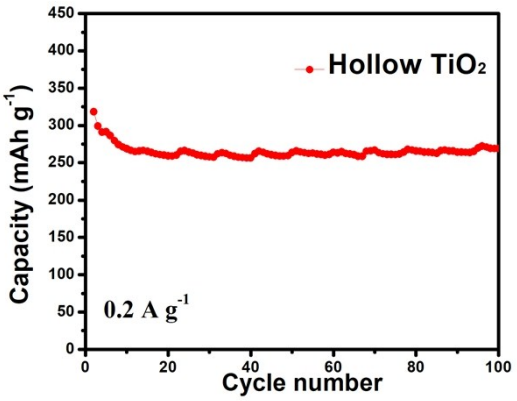

Figure S4. Cycling performance of the hollow TiO_2 electrode at a current density of 0.2 A g^{-1}.

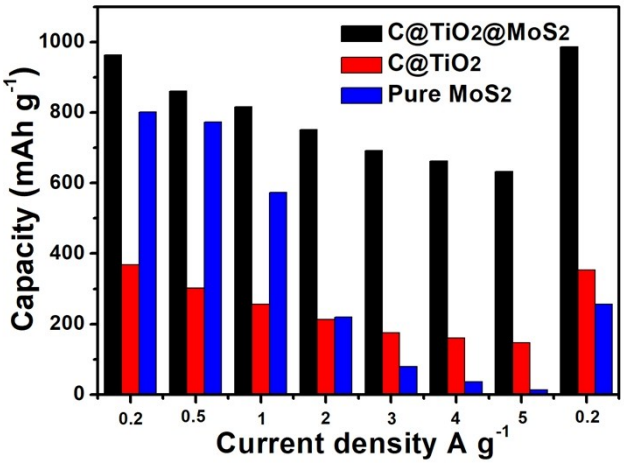

Figure S5. Histogram of the specific capacities of $C@TiO_2@MoS_2$, $C@TiO_2$ and pure MoS_2 batteries at various current densities.

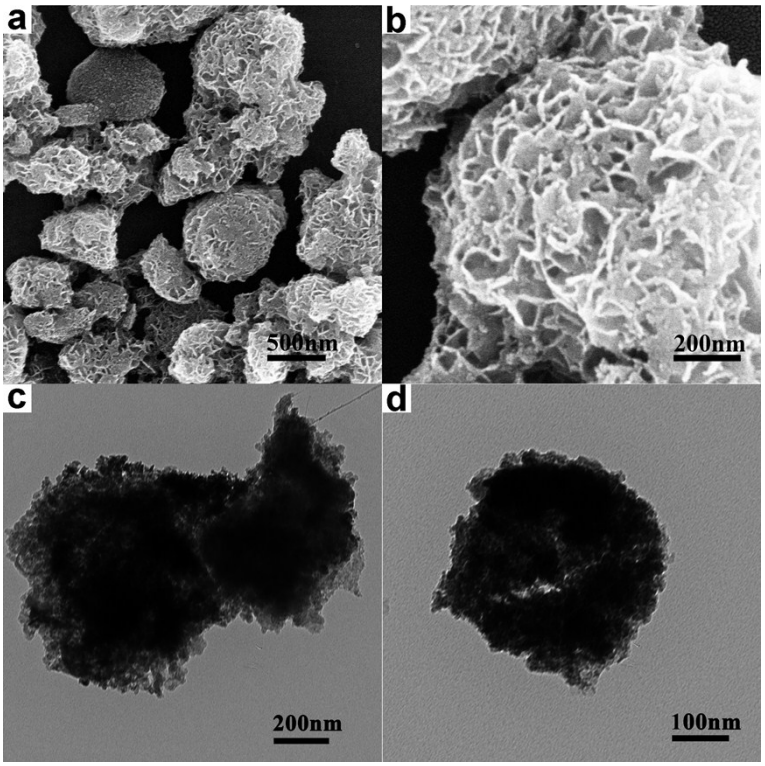

Figure S6. (a-b). SEM images and (c-d).TEM images of C@TiO_2@MoS_2 composites after 600 cycles at 1 A g^{-1}.

Element	C K	O K	Mo K	S K	Ti K	Total
Wt %	12.85	17.56	35.47	18.41	15.71	100

Table S1. The contents of each component of C@TiO_2@MoS_2.