3D hierarchical Co₃O₄ microspheres with enhanced lithium-ion

battery performance

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Fig. S1 SEM images of Co_3O_4 (a) nanoparticles, (b) nanorods.



Fig. S2 XRD diffraction pattern of as-prepared precursor CP-C (JCPDS card no. 048-0083).



Fig. S3 TG curve of as-prepared CP-C



Fig. S4 TEM images of (a) Co_3O_4 -A and (b) Co_3O_4 -C.



Fig. S5 Coulombic efficiencies of (a) Co_3O_4 -A, (b) Co_3O_4 -B and (c) Co_3O_4 -C electrodes at 200 mA g⁻¹; (d) Co_3O_4 -C electrode at 500 mA g⁻¹.



Fig. S6 The discharge-charge profiles of the Co₃O₄-C at different current densities.



Fig. S7 SEM images of the 3D Co_3O_4 hierarchical microspheres tested as lithium-ion battery anode materials after 50 cycles.