Electronic Supplementary Information (ESI)



Figure S1. (a) FE-SEM image of RuO₂@Co₃O₄ HNFs; (b, c and d) Corresponding EDS mapping with elements O, Ru and Co.



Figure S2. FE-SEM image of the pure Co₃O₄ NFs.



Figure S3. XRD patterns of the pure Co_3O_4 NFs.



Figure S4. (a) XPS general spectra of the RuO₂@Co₃O₄ HNFs and deconvoluted (b) Ru 3p, (c) Co 2p and (d) O 1s spectra.



Figure S5. XRD patterns of as-prepared $RuO_2@Co_3O_4$ HNFs composite calcined at 350 and 450 °C.



Figure S6. FE-SEM image of RuO₂@Co₃O₄ HNFs with high atomic ratio of Ru: Co.



Figure S7. FE-SEM image of the RuO₂@Co₃O₄ HNFs after cycling test.