Supporting Information

Fig. S1  High resolution SEM images of (a) Ni nanowires, (b) Ni oxalate nanowires, (c) Ni nanofoam, and (d) RuO$_2$/Ni NF, where the red circles indicate RuO$_2$ deposition. (e) EDX mapping of RuO$_2$/Ni NF.
Fig. S2  (a) SEM and (b) TEM image and (c) XRD pattern of fully discharged RuO$_2$/Ni NF electrode. (d) ATR-FTIR measurement of pristine and discharged RuO$_2$/Ni NF electrode. (e) XPS spectra of O 1s of RuO$_2$ nanoflakes demonstrate the hydrous nature with OH and H$_2$O hydrogen
bonded to each other. \[1\] (f) Charge-discharge curves in 13 cycles of RuO$_2$/Ni NF at 0.1 mA cm$^{-2}$ with capacity limit 0.28 mAh cm$^{-2}$ (1000 mAh g$^{-1}$ RuO$_2$) after 3 full CV cycles of 2.0-4.0 V at 0.1 mV s$^{-1}$. The arrows indicate gradual decrease and increase of the discharge and charge potentials, respectively.

References