Supplementary Information

MnO₂ Nanoflowers and Polyaniline Nanoribbons Grown on Hybrid Graphene/Ni 3D Scaffold by In-situ Electrochemical Technique for High-performance Asymmetric Supercapacitors

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Figure S1. Nitrogen adsorption-desorption isotherm (a) and pore size distribution (b) of the as-prepared GF.

Figure S2. TEM images of MnO₂ (a) and PANI (b) peeled off from Ni foam.
Figure S3. Cycling behaviour of the obtained MnO$_2$/HGNF and PANI/HGNF electrodes in 1 M Na$_2$SO$_4$ solution at a current density of 2 A g$^{-1}$.

Figure S4. SEM images of MnO$_2$/HGNF (a,b) and PANI/HGNF (c,d) electrodes in ASC-1 after 2000 cycles at a current density of 2 A g$^{-1}$. 
**Figure S5.** TEM images of MnO$_2$/HGNF (a,b,) and PANI/HGNF (c,d) in ASC-1 after 2000 cycles at a current density of 2 A g$^{-1}$. 