Supporting Information

MOF-derived self-sacrificing route to hollow NiS$_2$/ZnS nanospheres for high performance supercapacitors

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Figure S1. FT-IR spectrum (a) and XRD pattern (b) of the Ni/Zn-BDC MOF spheres.

Figure S2. EDS pattern of the Ni/Zn-BDC MOF spheres.
Figure S3. XRD (a) and XPS (b-c) patterns of the NiS$_2$/ZnS hollow nanospheres
Figure S4. EDS pattern of the NiS\textsubscript{2}/ZnS hollow nanospheres.
Figure S5. N$_2$ adsorption-desorption isotherms and pore size distribution (inset) of the NiS$_2$/ZnS hollow nanospheres.
**Figure S6.** CV curves of AC electrode at different scan rates; (b) GCD curves of AC electrode at different current densities; (c) The corresponding specific capacitance calculated by the GCD curves; (d) CV curves of the ASC at different voltage windows at a scan rate of 30 mV s$^{-1}$. 