

Supplementary Information for

Three dimensional $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4$ -graphene-2D-MoSe₂: an Efficient Electrode Material for Supercapacitor

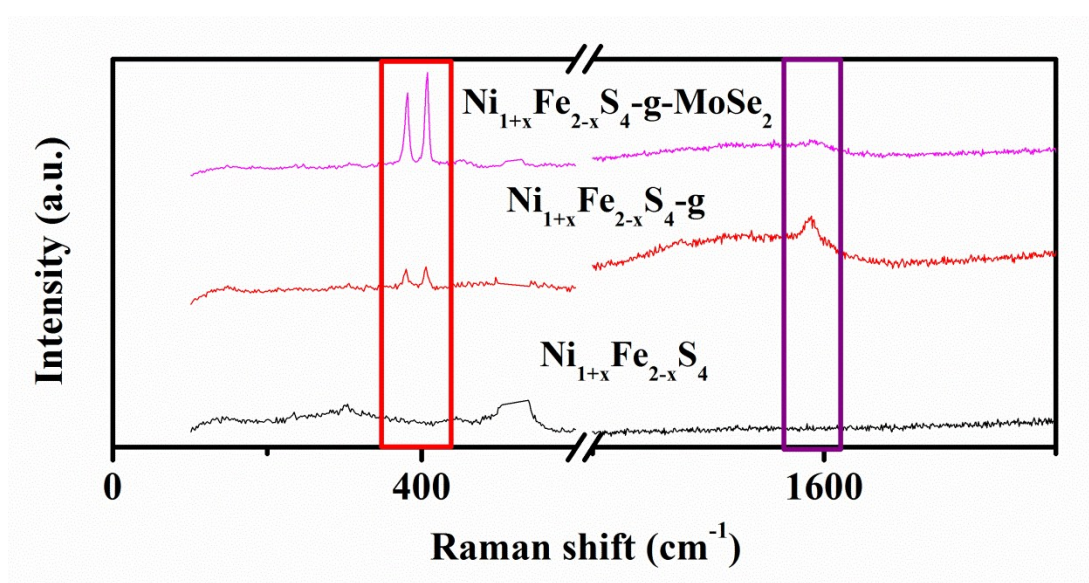


Figure S1. Raman spectra of $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4$, $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g}$ and $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g-MoSe}_2$.

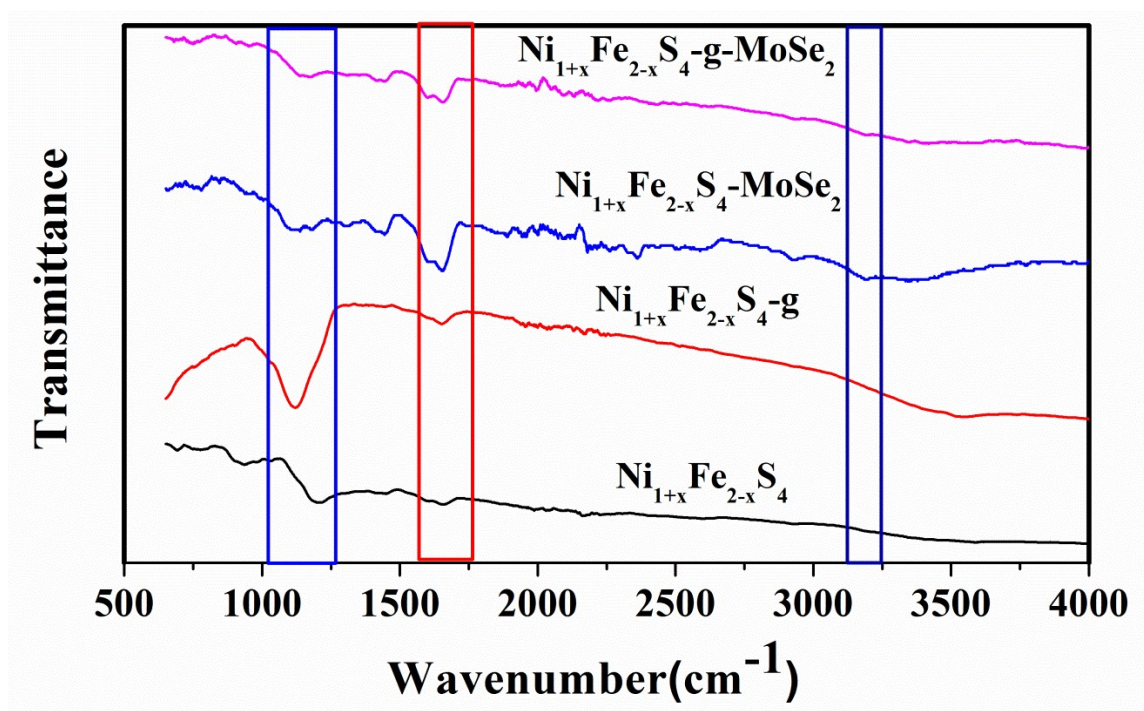


Figure S2. FTIR spectra of $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4$, $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g}$, $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-MoSe}_2$ and $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g-MoSe}_2$.

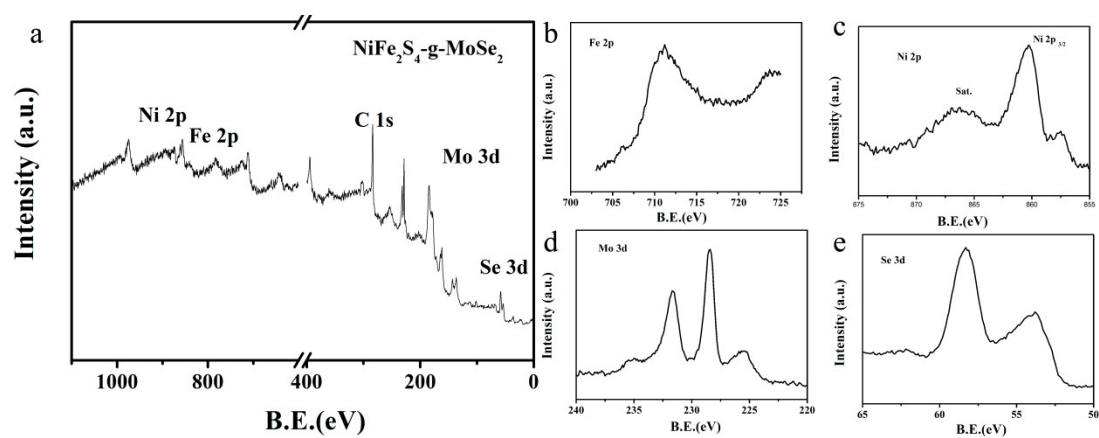


Figure S3 XPS survey spectrum of $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g-MoSe}_2$ (a). High-resolution XPS spectra of Fe 2p (b), Ni 2p (c) Mo 3d (d) and Se 3d (e) of $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g-MoSe}_2$.

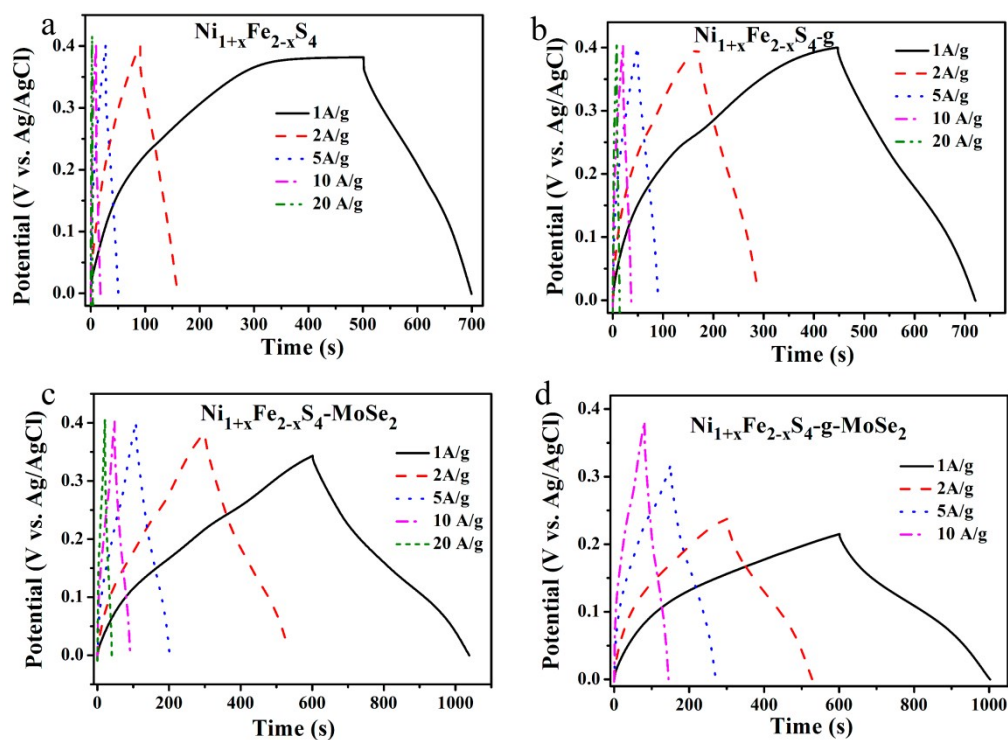


Figure S4 GCD curves of $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4$, $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g}$, $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-MoSe}_2$ and $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g-MoSe}_2$ at different current densities.

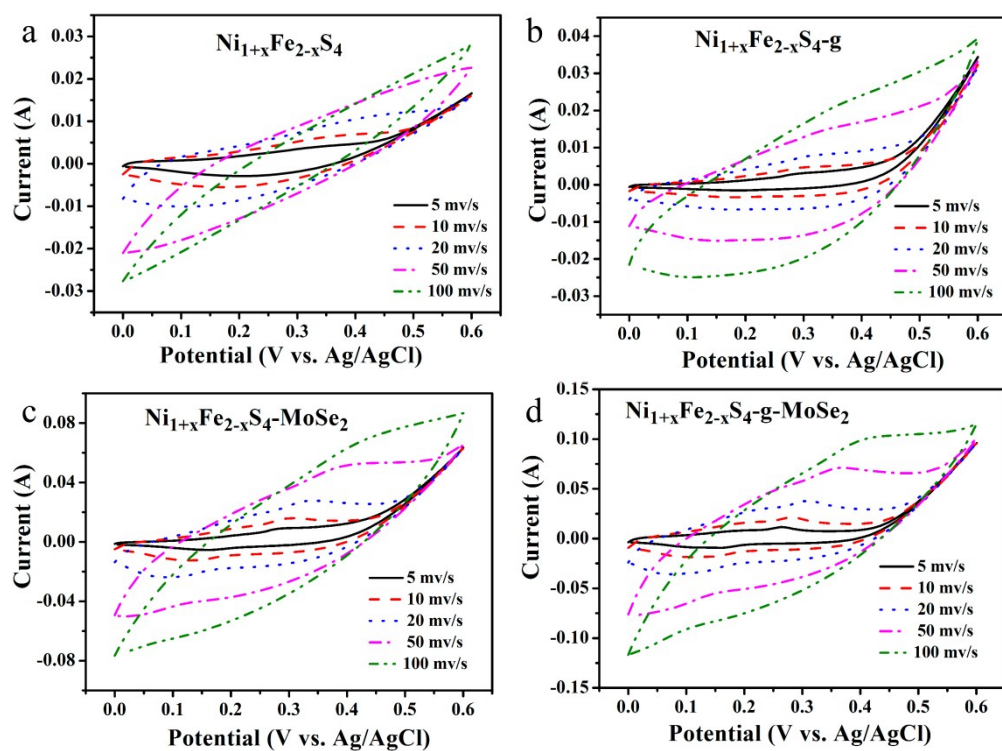


Figure S5 CV curves of $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4$, $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g}$, $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-MoSe}_2$ and $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g-MoSe}_2$ at different scanning rates.

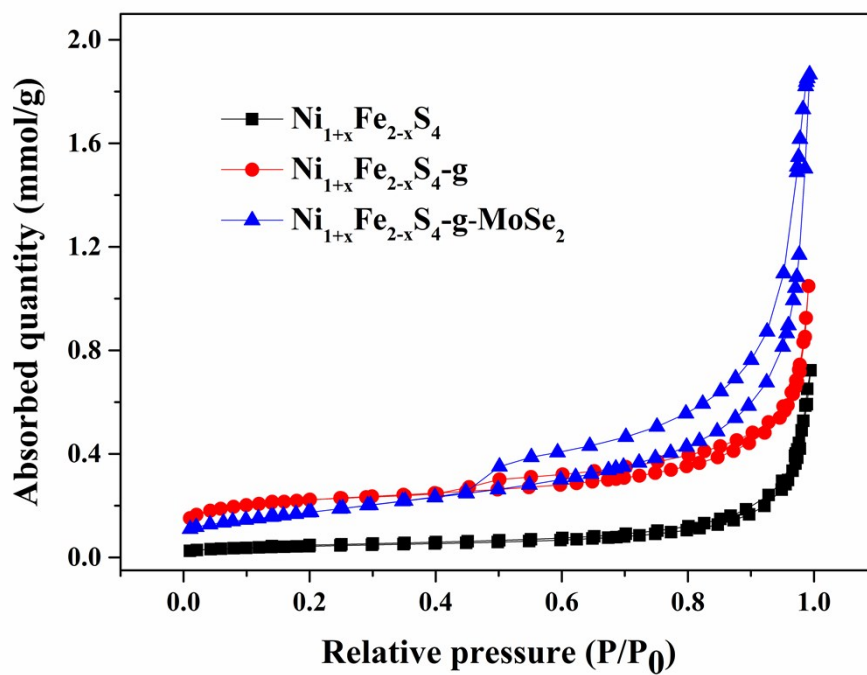


Figure S6 N₂ adsorption-desorption isotherm of $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4$, $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g}$ and $\text{Ni}_{1+x}\text{Fe}_{2-x}\text{S}_4\text{-g-MoSe}_2$.