

## Electronic Supplementary Information

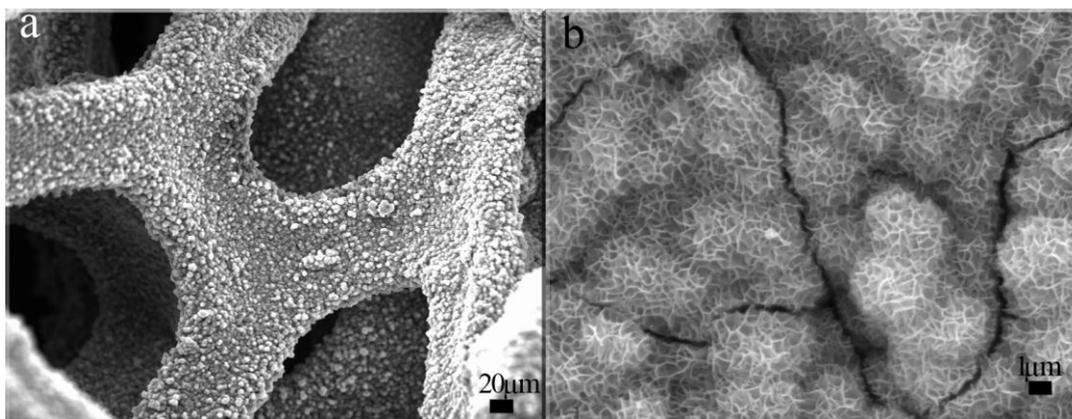
3D porous nano/micro nickel sulfides with hierarchical structure: controlled synthesis, structure characterization and electrochemical properties

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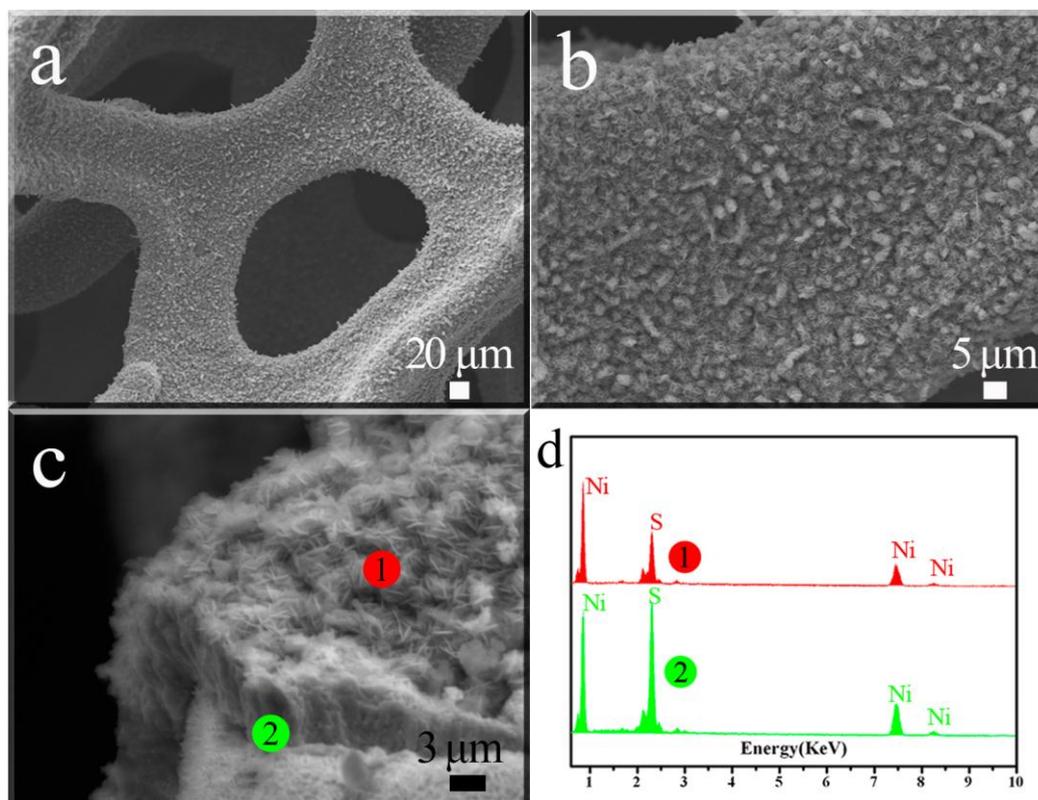
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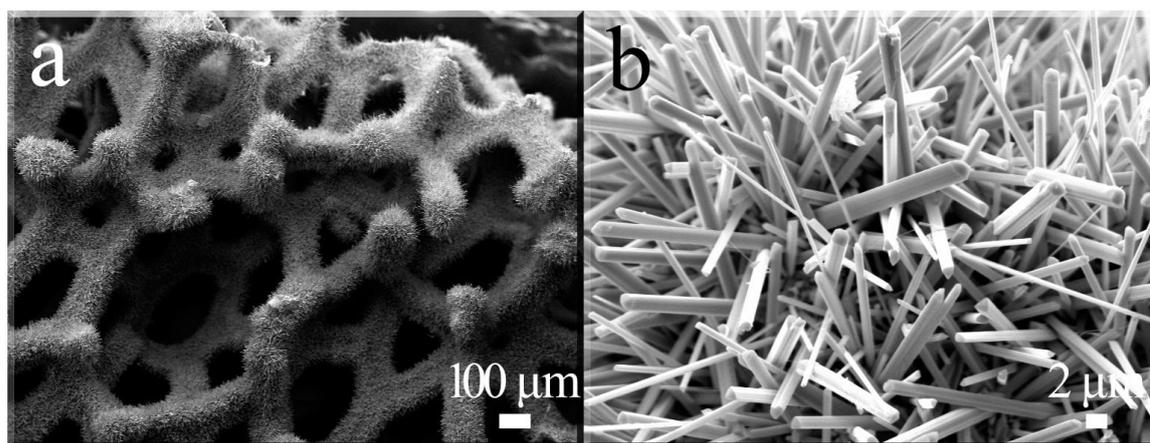
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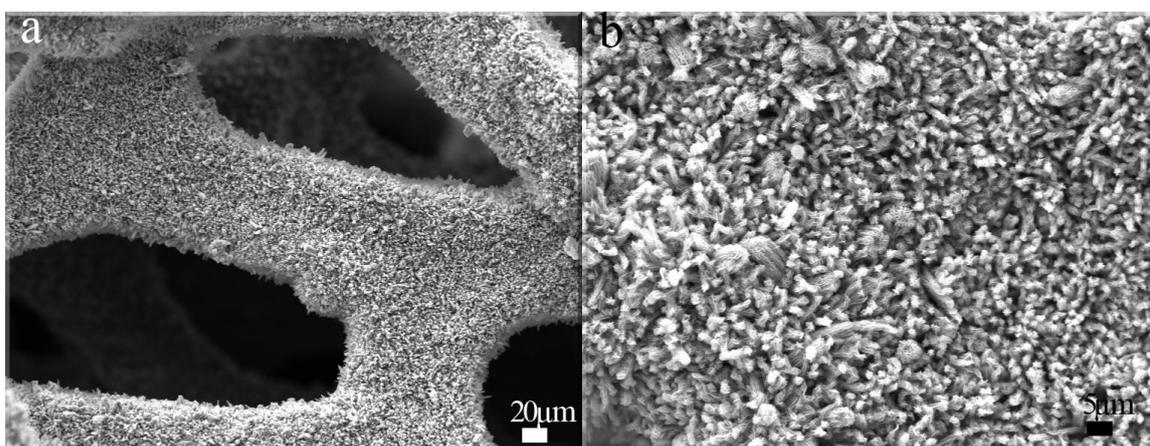
**Figure 1S** Characterization of sample 1: (a) overall view; (b) SEM micrographs of the flower-like nickel sulfide microspheres.



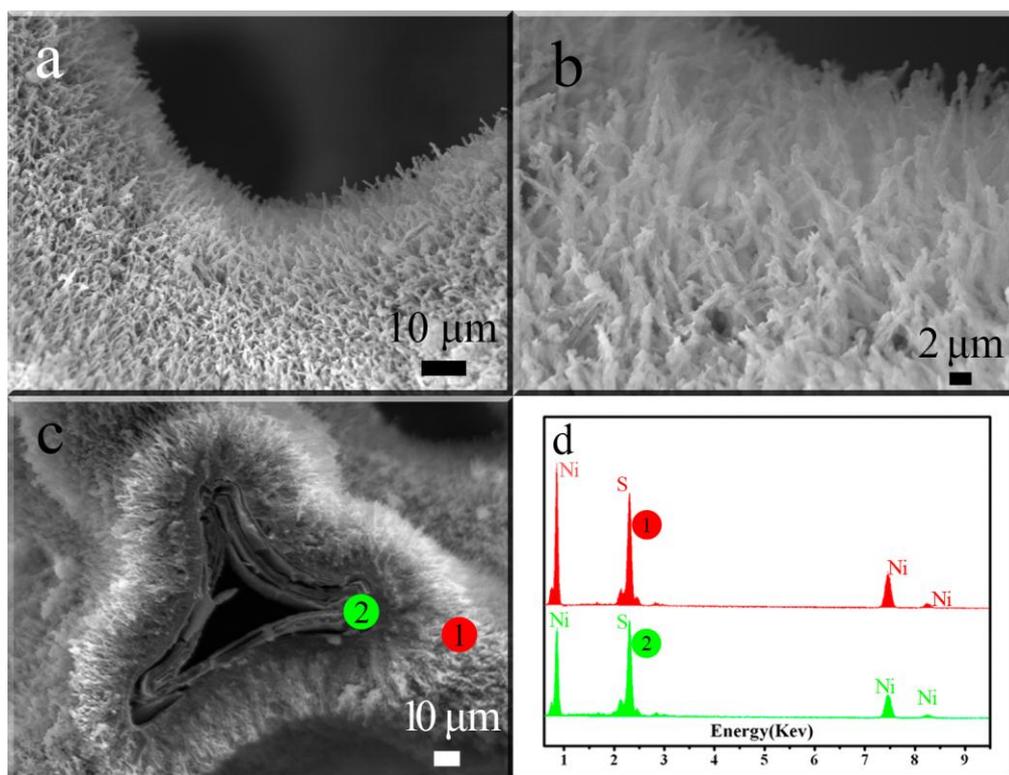
**Figure 2S** Characterization of sample 2: (a) overall view; (b) SEM micrographs of the flower-like nickel sulfide nanoplates; (c) cross-sectional view and (d) EDS spectra.



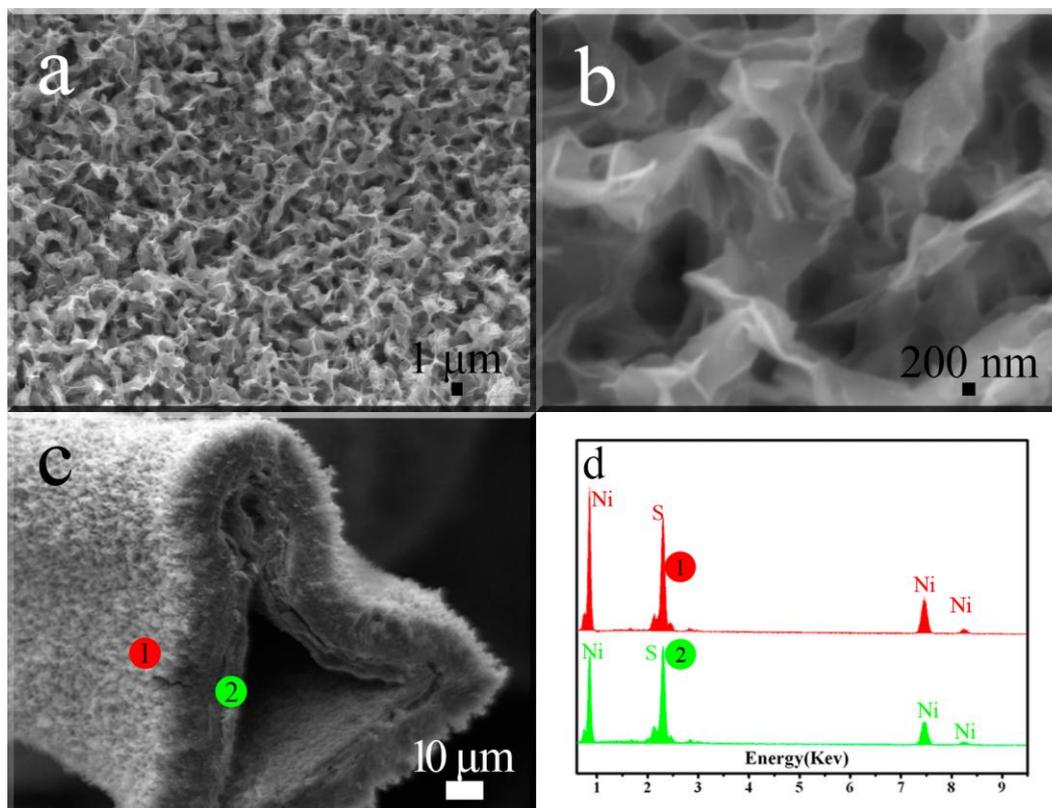
**Figure 3S** Characterization of sample **3**: (a) overall view; (b) SEM micrographs of the prism-like nickel sulfide microrods.



**Figure 4S** Characterization of sample **4**: (a) overall view; (b) SEM micrographs of the chain-like nickel sulfide nanoplates.



**Figure 5S** Characterization of sample 5: (a) overall view; (b) SEM micrographs of the chain-like nickel sulfide nanoplates; (c) cross-sectional view and (d) EDS spectra.



**Figure 6S** Characterization of sample 6: (a) overall view; (b) SEM micrographs of the chain-like nickel sulfide nanoplates; (c) cross-sectional view and (d) EDS spectra.