Supporting information for:

**3D-Hierarchical SnS\textsubscript{2} Micro/nano-Structures: Controlled Synthesis, Formation mechanism and Lithium ion storage performances**

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**Fig. S1** a, TEM images of another assemblies of SAMPLE 2; b, magnified image of area A marked in a. The 10° angle between the lattice fringes with a new space of 1.6 nm.
**Fig. S2** The FESEM images of the obtained SnS$_2$ nanoplates synthesized by a simple hydrothermal process with 0.01 mol/L SnCl$_4$ and a certain amount of thioacetamide (TAA): a-b, 3.2 mmol, Sn:TAA=1:4; c-d, 6.4 mmol, Sn:TAA=1:8; e-f, 12.8 mmol, Sn:TAA=1:16.

**Fig. S3** The FESEM images of the obtained SnS$_2$ micro-flowers synthesized by a simple hydrothermal process with 0.01 mol/L SnCl$_4$ and a certain amount of thiourea (Tu): a-b, 3.2 mmol, Sn:Tu=1:4; c-d, 6.4 mmol, Sn:Tu=1:8; e-f, 12.8 mmol, Sn:Tu=1:16.