

## Supplementary Information

### Porous tin disulfide nanosheets with the room temperature ferromagnetic nature

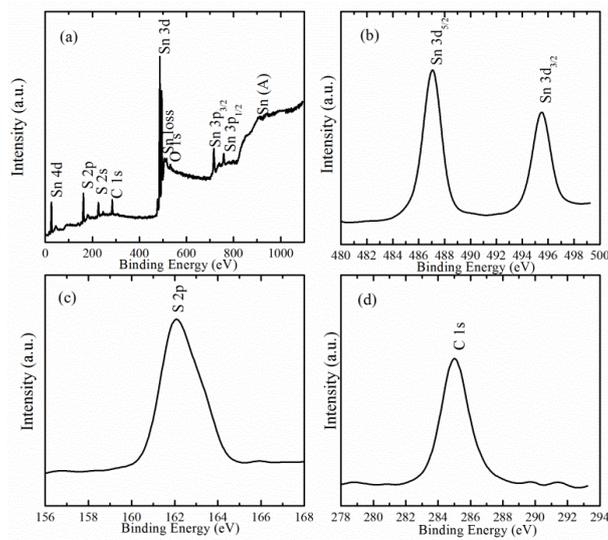
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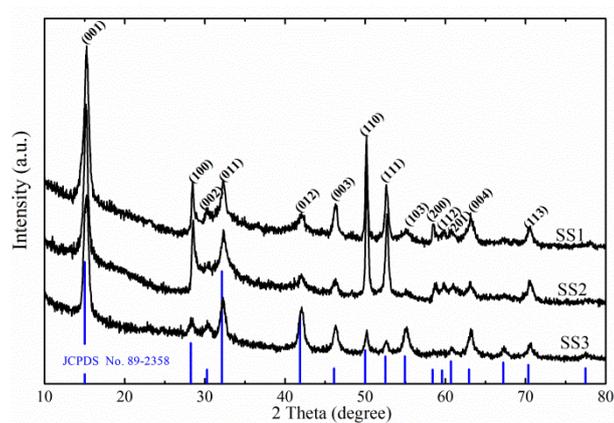
1. Table S1. ICP results for the SnS<sub>2</sub> nanosheets (SS3).
2. Fig. S1 (a) Survey, (b) Sn 3d, (c) S 2p spectras for the porous SnS<sub>2</sub> nanosheets. The obtained binding energy was calibrated using C1s as the reference at 284.8 eV (SS3).
3. Fig. S2. XRD results for sample SS1, SS2 and SS3.
4. Fig. S3. (a) TEM and (b) HRTEM images for sample SS1. Inset in Fig. S3a is the corresponding selected area electron diffraction (SAED) result.
5. Fig. S4. (a) TEM and (b) HRTEM images for sample SS2. Inset in Fig. S4a is the corresponding energy-dispersive X-ray spectroscopy (EDS) result.
6. Fig. S5. BET results for sample SS1, SS2 and SS3.
7. Fig. S6. FC and ZFC curves for sample SS1, SS2 and SS3.
8. Fig. S7. HRTEM image for sample SS3, where the defects and boundary can be seen clearly.

Element content (ppm)	Fe	Co	Ni	Mn	Cr
First	6.8	1.5	0.9	0.1	1.1
Second	7.5	1.8	0.9	0.2	1.0

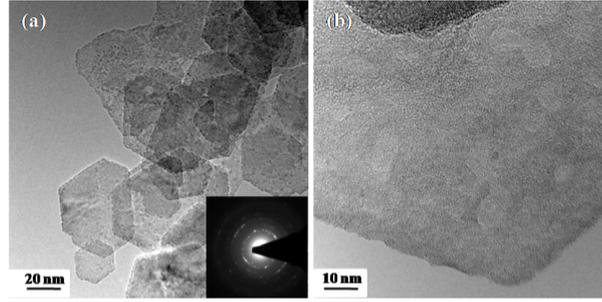
**Table S1.** ICP results for the SnS<sub>2</sub> nanosheets (SS3).



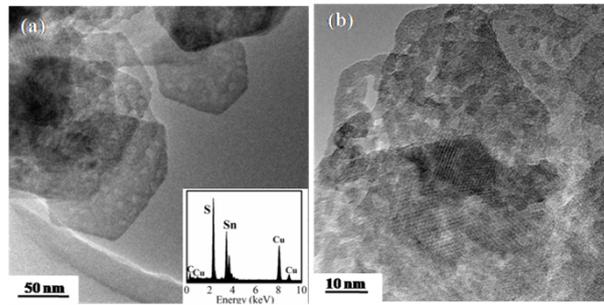
**Fig. S1** (a) Survey, (b) Sn 3d, (c) S 2p spectras for the porous SnS<sub>2</sub> nanosheets. The obtained binding energy was calibrated using C 1s as the reference at 284.8 eV (SS3).



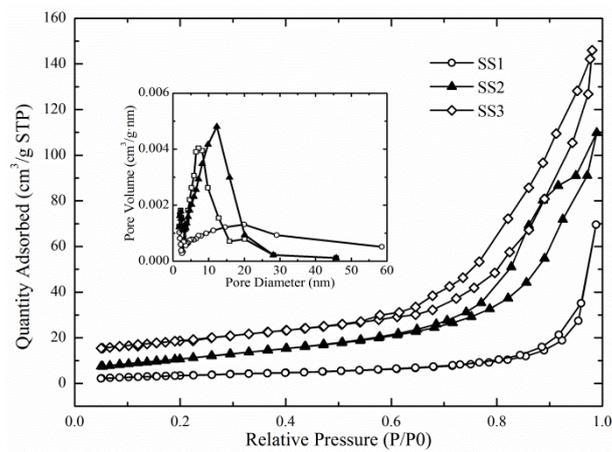
**Fig. S2.** XRD results for sample SS1, SS2 and SS3.



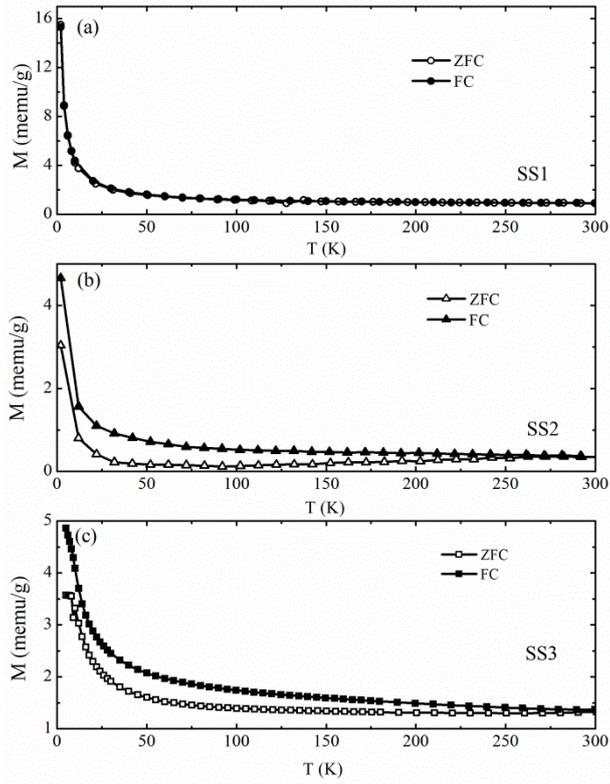
**Fig. S3.** (a) TEM and (b) HRTEM images for sample SS1. Inset in Fig. S3a is the corresponding selected area electron diffraction (SAED) result.



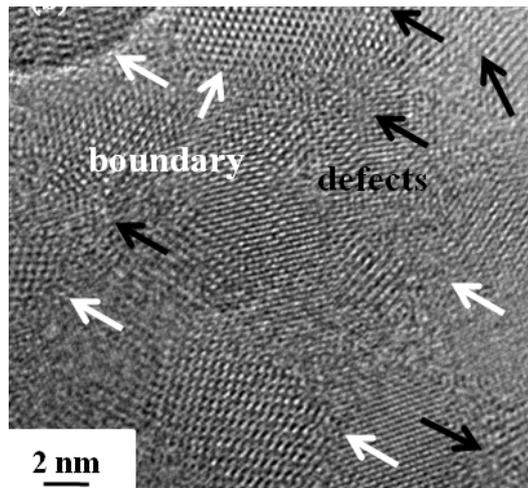
**Fig. S4.** (a) TEM and (b) HRTEM images for sample SS2. Inset in Fig. S4a is the corresponding energy-dispersive X-ray spectroscopy (EDS) result.



**Fig. S5.** BET results for sample SS1, SS2 and SS3.



**Fig. S6.** FC and ZFC curves for sample SS1, SS2 and SS3.



**Fig. S7.** HRTEM image for sample SS3, where the defects and boundary can be seen clearly.