

Supporting information

Extraordinary Lithium Ions Storage Capabilities Achieved by SnO₂ Nanocrystals Exposed of {221} Facets

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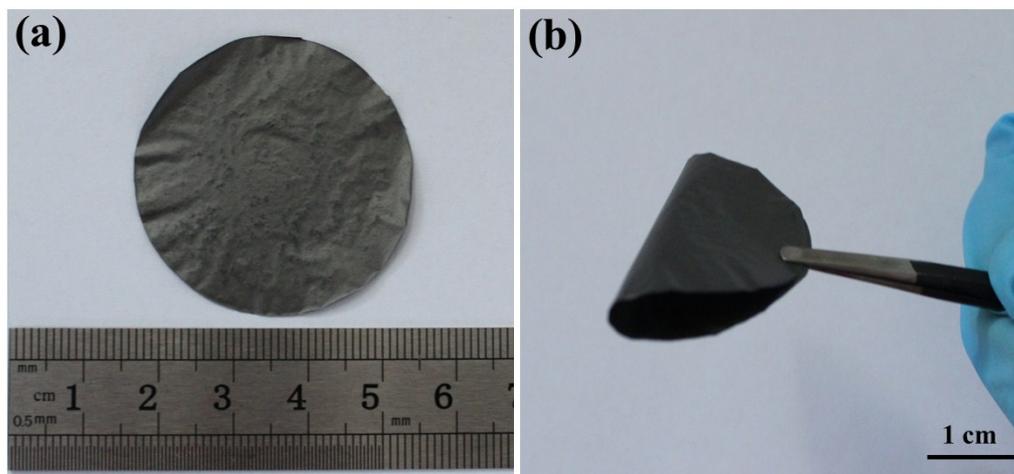


Fig. S1 Optical photos of (a) pure G/CNT film and (b) its flexibility.

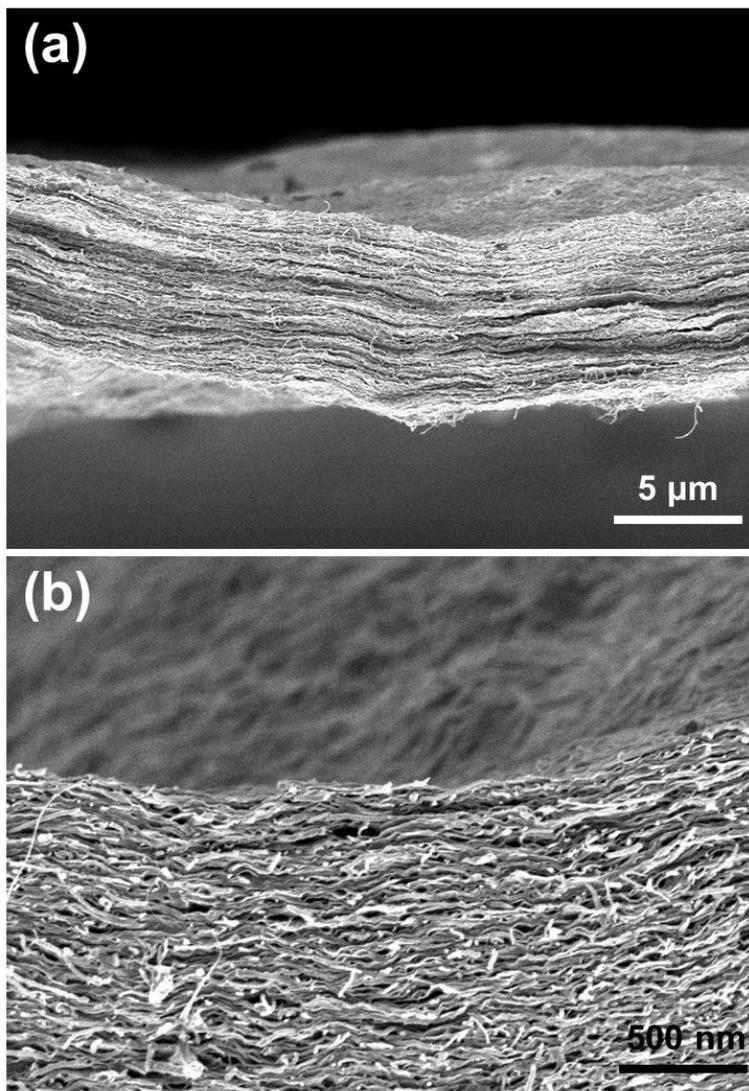


Fig. S2 SEM images of pure G/CNT film with good porous structures at (a) low and (b) high magnifications.

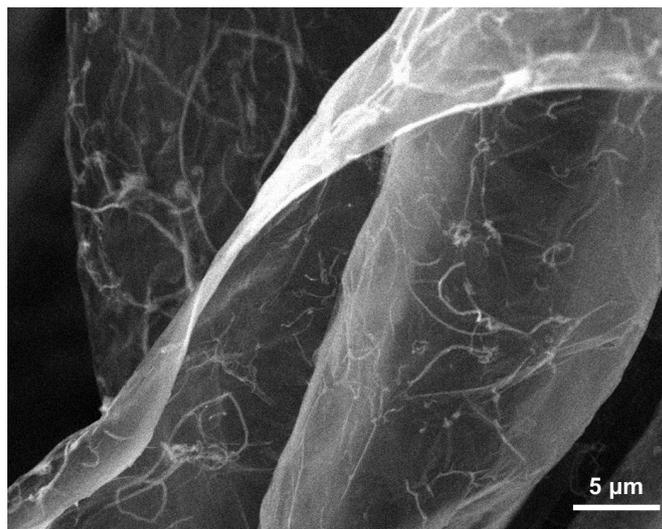


Fig. S3 SEM image of pure G/CNT matrix with CNTs bonded on the surface of graphene sheets.

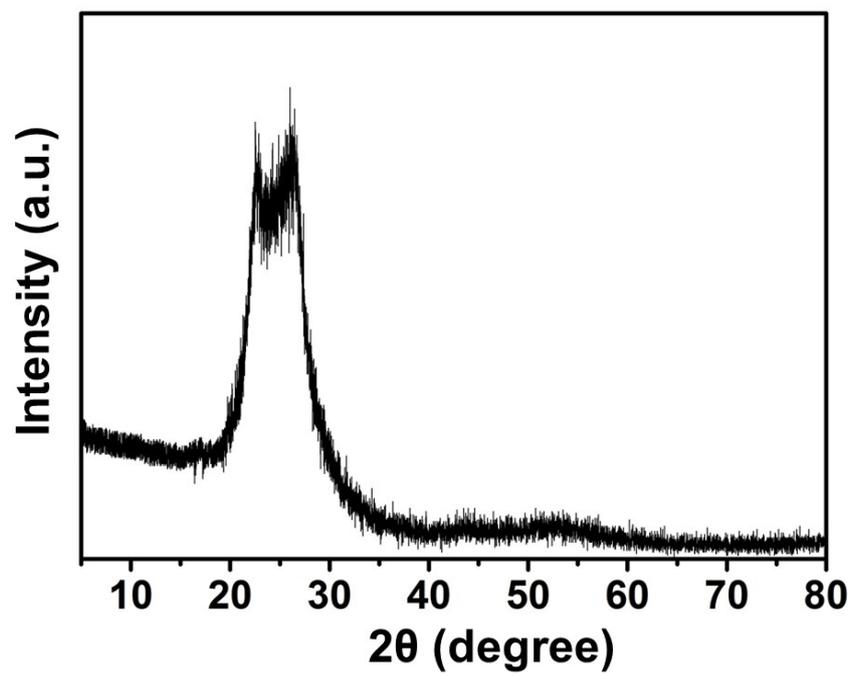


Fig. S4 XRD pattern of pure G/CNT film.

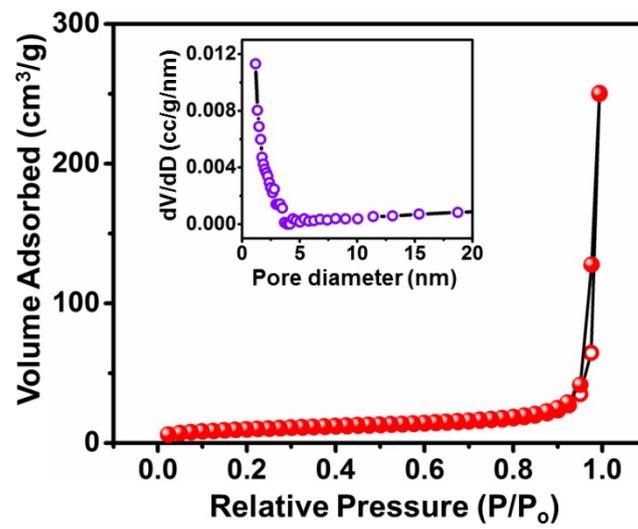


Fig. S5 N₂ adsorption / desorption isotherms of pure SnO₂-O nanoparticles.

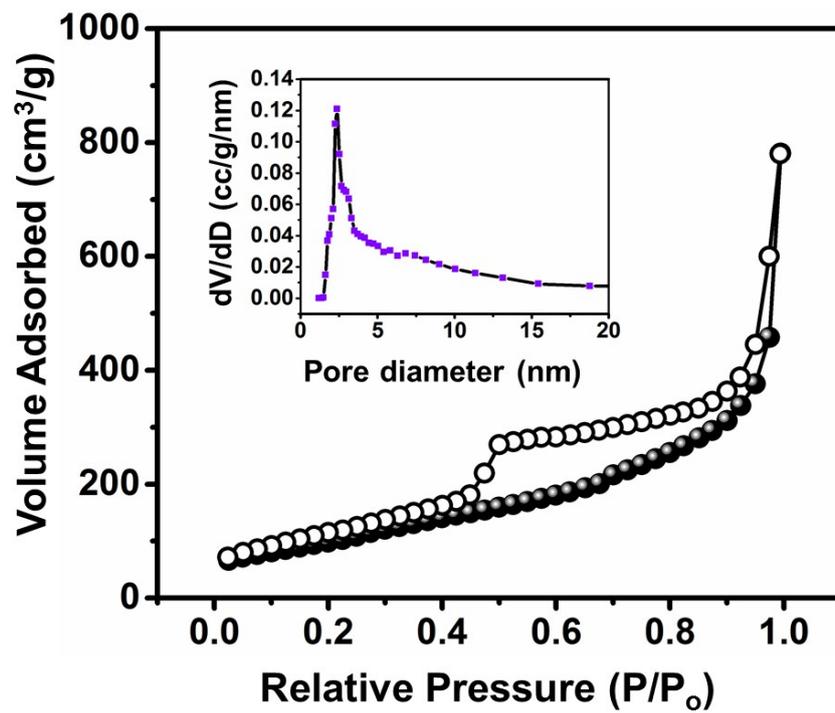


Fig. S6 N₂ adsorption / desorption isotherms of pure G/CNT film.

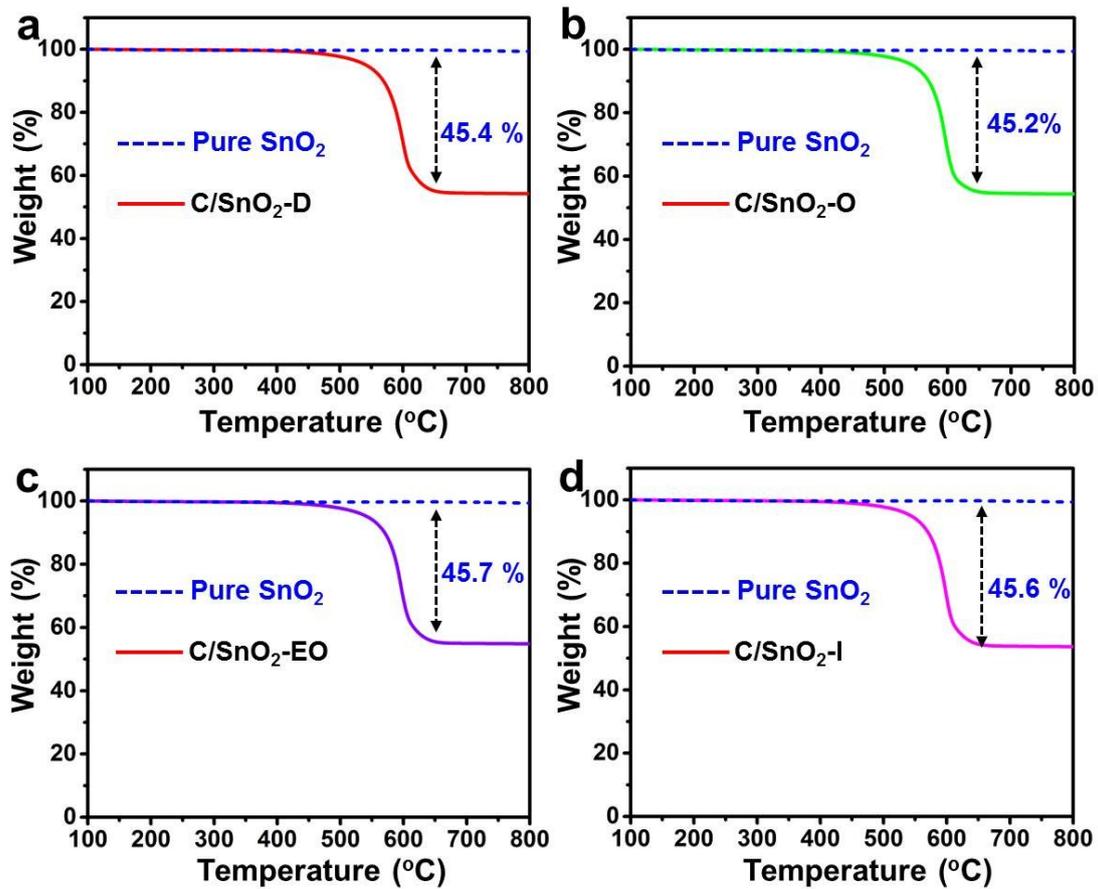


Fig. S7 TGA curves of (a) C/SnO₂-D, (b) C/SnO₂-O, (c) C/SnO₂-EO and (d) C/SnO₂-I films, which indicate that the SnO₂ nanoparticles in these films were near ~54.4 wt%.

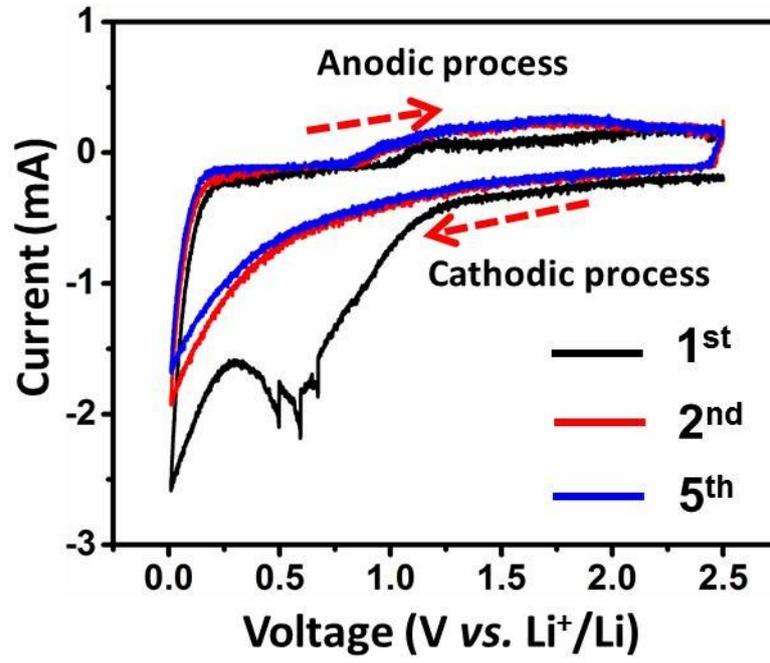


Fig. S8 CV curves of pure G/CNT film on the 1st, 2nd and 5th cycles at 0.1 mV/s.

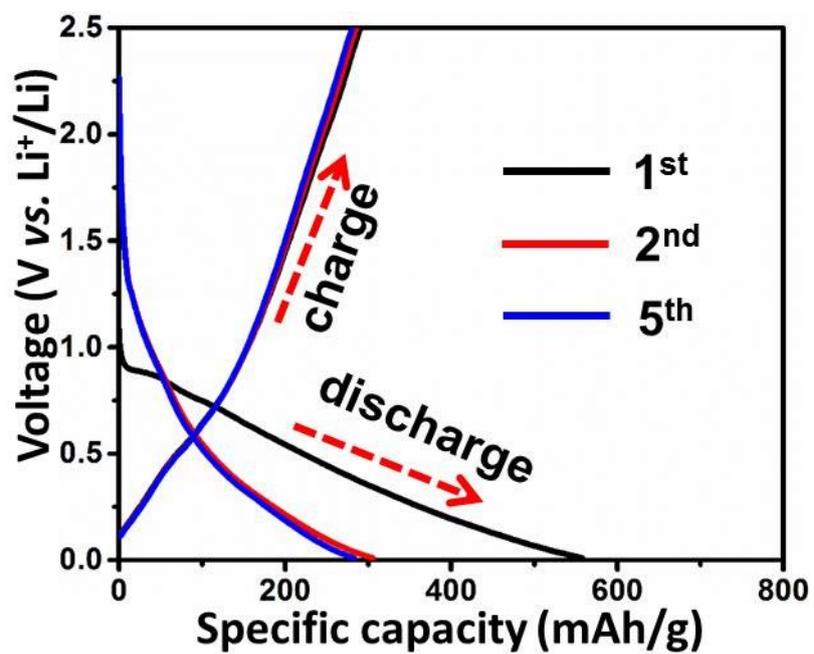


Fig. S9 Discharge / charge curves of G/CNT film on the 1st, 2nd and 5th cycles at 0.1 A/g.

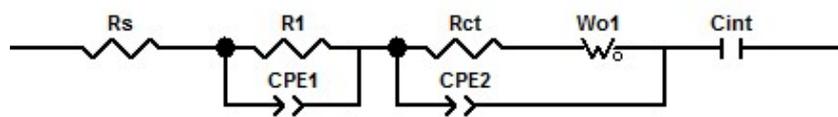


Fig. S10 Equivalent circuit model used to fit the experimental data.

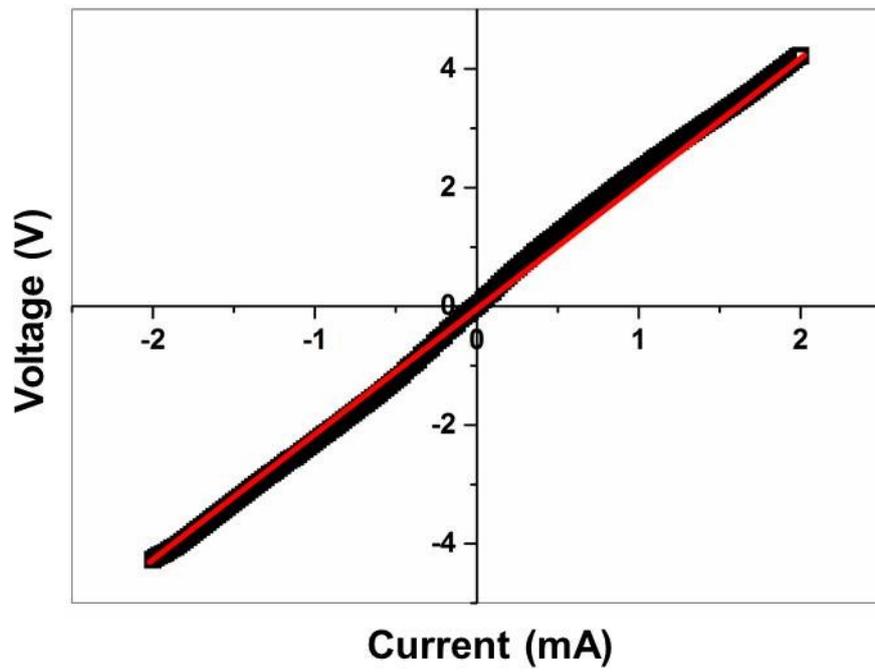


Fig. S11 Current-voltage curve of a fiber-shaped C/SnO₂-O material with a scan rate of 100 mV/s.