

Electronic Supporting Information

Anodically fabricated self-organized nanoporous tin oxide film as a supercapacitor electrode material

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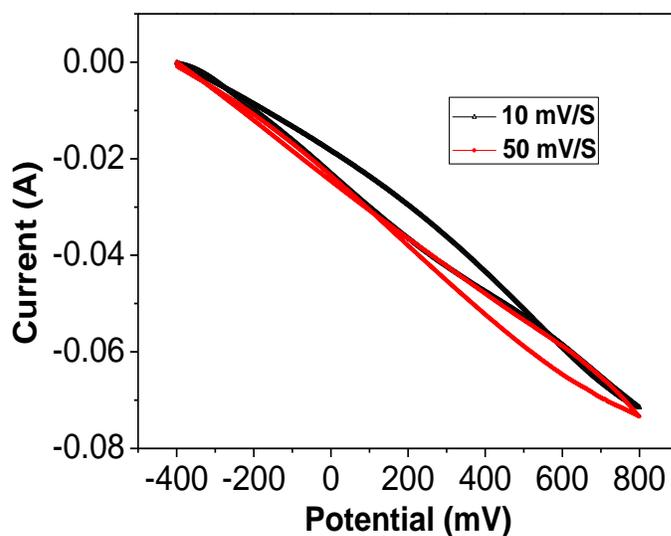


Fig. S1: CV of tin substrate in 0.1M Na₂SO₄.

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Although the tin substrate may have a thin native oxide on its surface even after polishing and cleaning the surface, we didn't observed any noticeably meaningful capacitive behavior of the substrate. The extremely small capacitive behavior exhibited by the CV (Fig. S1) can be due to the precipitation of some tin oxides on the electrode surface during anodic bias of the cycle. Also, the electrolyte became milky during long run of CV cycles. However, the change in color of the electrolyte was not observed when the tin oxide was grown on the tin surface. In all electrochemical measurement experiment, only the porous tin oxide film was exposed to the electrolyte masking all other part of the substrate. This evidence clearly supports that the tin substrate almost does not have contribution to the total specific capacitance of the sample.

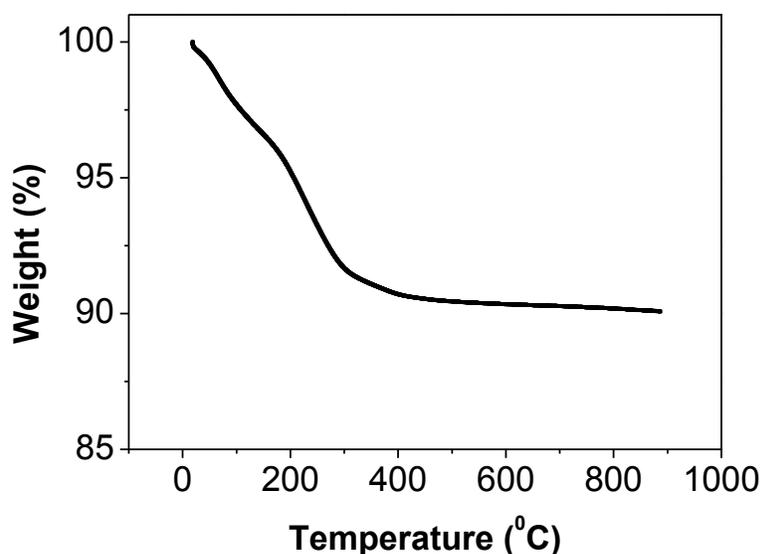


Fig. S2: TGA of powder scratched out mechanically from tin electrode at a rate of 20 deg /min in N₂ flow.

The initial weight loss is due to water and some oxalate impurities. Then the weight of the materials remained almost constant.