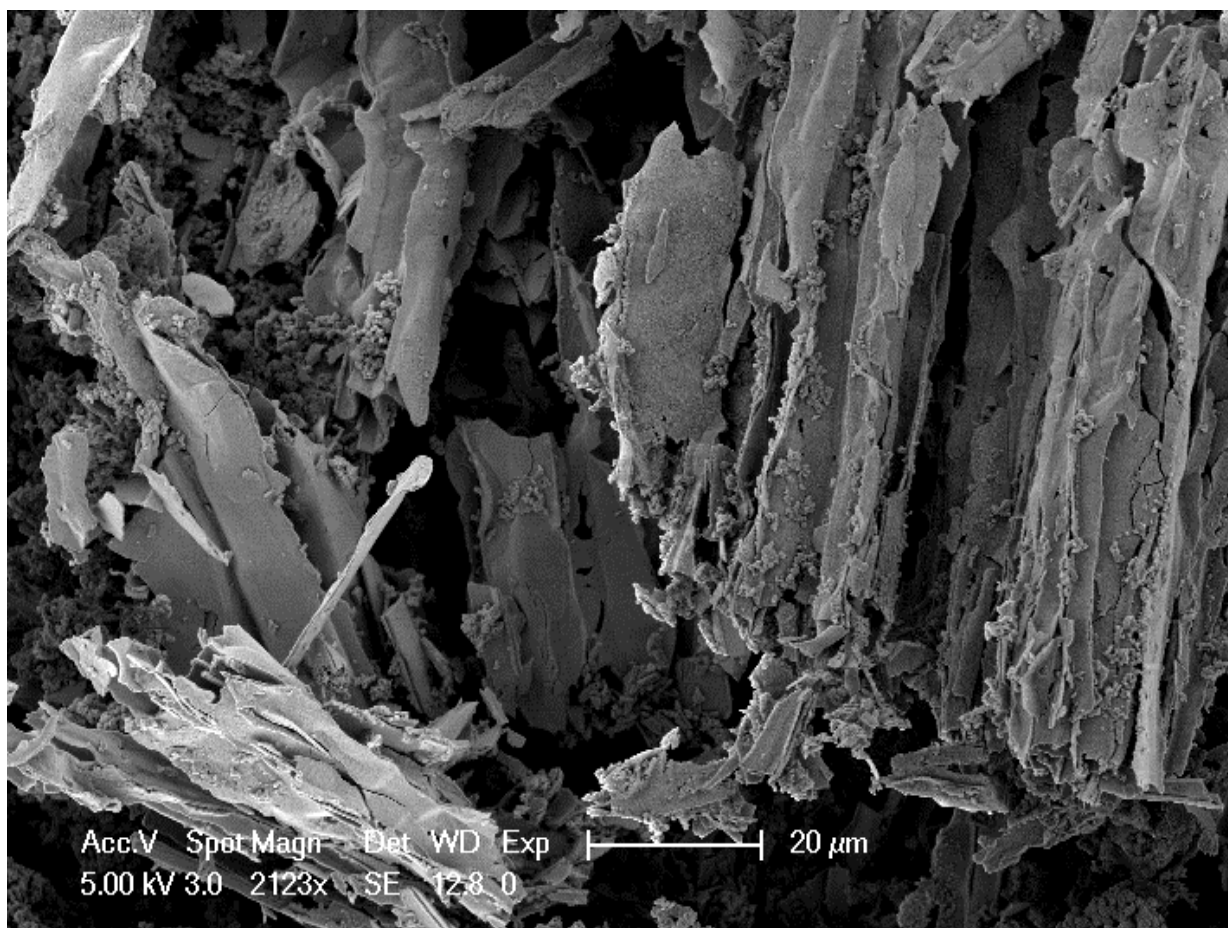


### Supporting information



**Fig. S1** The self-supporting 3D hierarchical SnO<sub>2</sub> nanorods array structures synthesized by solvothermal are high yield and repeatable.