Supplementary Material (ESI) for Journal of Materials Chemistry

Supporting information

Formation of single-crystal tellurium nanowires and nanotubes through a hydrothermal recrystallization process and their room temperature gas sensing properties

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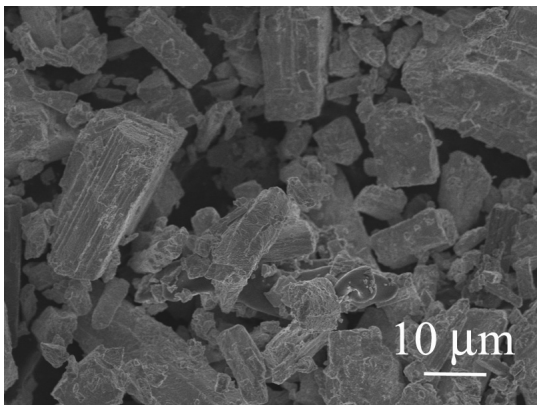

Fig. S1 SEM image of the starting tellurium powder.

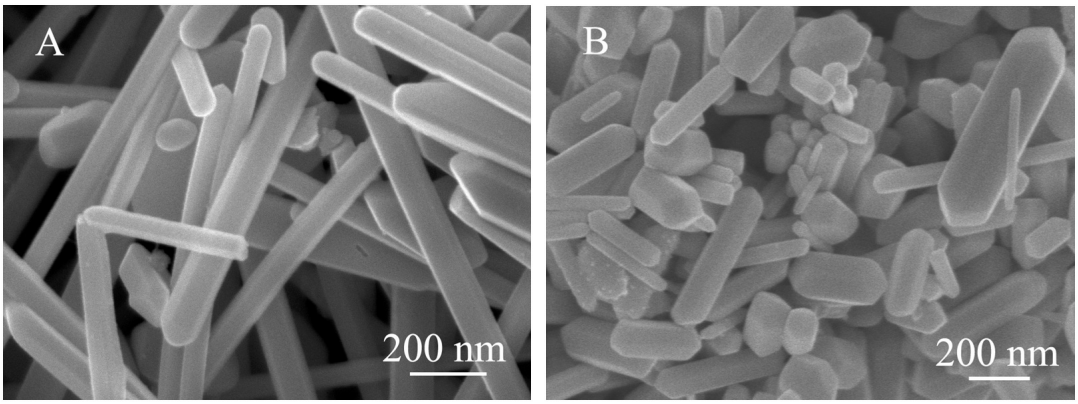

Fig. S2 SEM images of the sample obtained with different amount of hydrazine hydrate (85%) added in the starting solution, (A) 5 mL, (B) 40 mL.

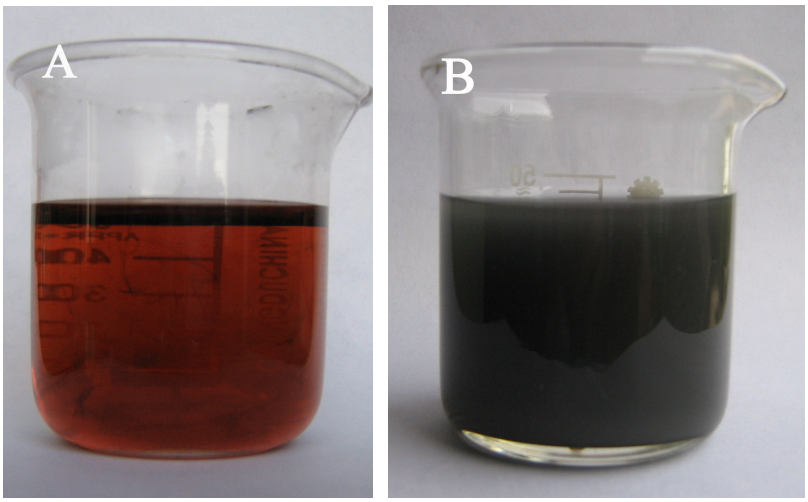

Fig. S3 Digital photographs of the solutions obtained by heating 15 mg tellurium powder in 40 mL 85% hydrazine hydrate solution at 160 °C for 6 h. (A) immediately after being taken out from the Teflon liner when cooled down to room temperature naturally, (B) after being taken out and aged for 10 h at room temperature.

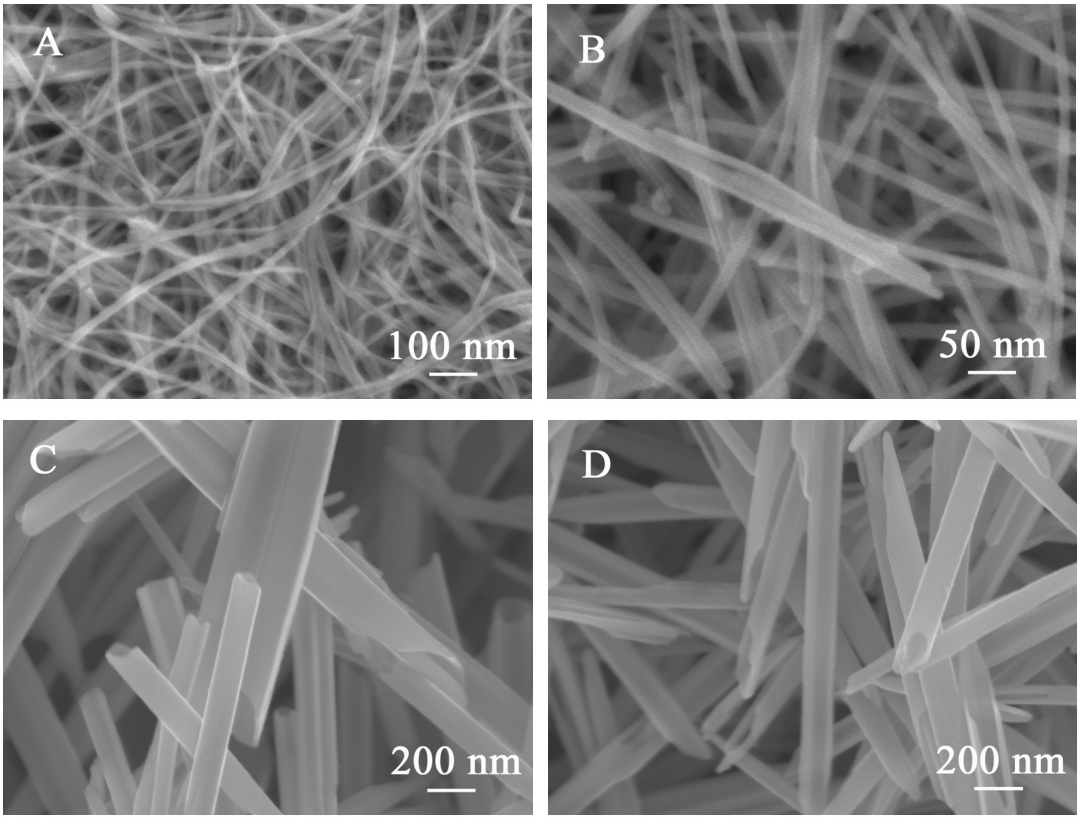

Fig. S4 SEM images of (A, B) tellurium nanowires obtained after heated at 140 °C for 1 h and 3 h, respectively. (C, D) tellurium nanotubes obtained after heated at 140 °C for 3 h and 6 h, respectively.