

Electronic Supplementary Material

Large-scale production of tungsten trioxide nanoparticles for electrochromic application

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Supporting Figures

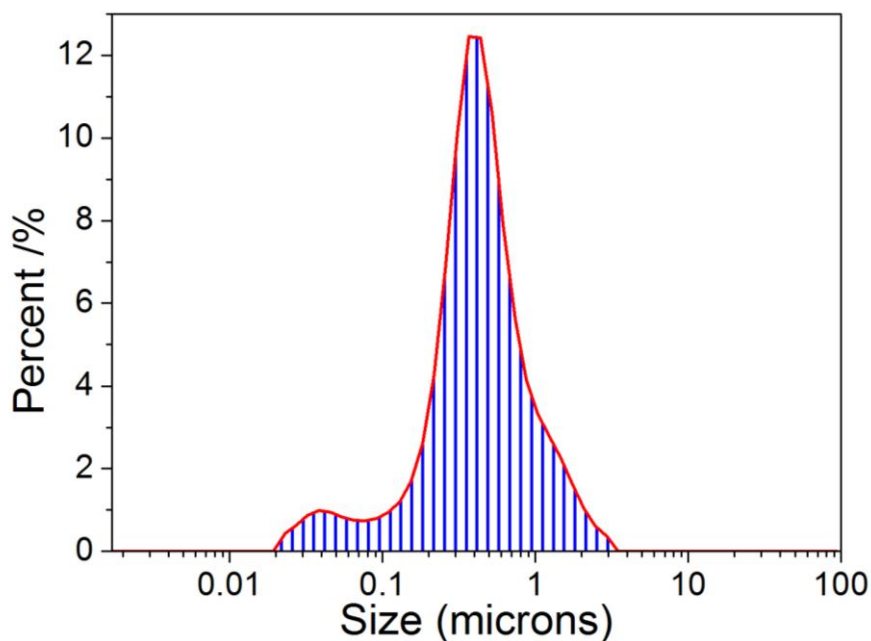


Fig. S1 Size distribution curve of WO₃ particles from zone B, synthesized at 1300 °C with an Ar gas flow rate of 2 L/min.

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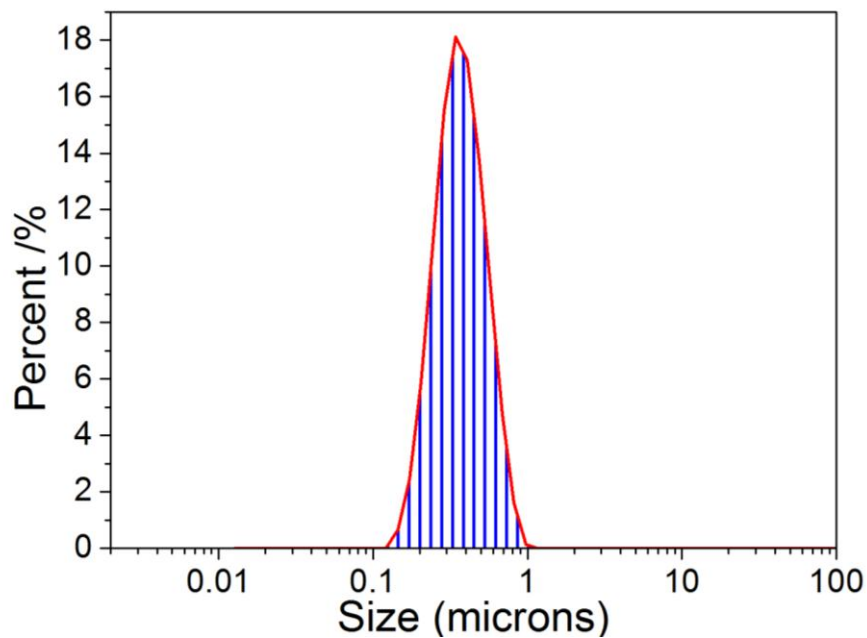


Fig. S2 Size distribution curve of WO_3 particles from zone B, synthesized at 1350 °C with an Ar gas flow rate of 2 L/min.

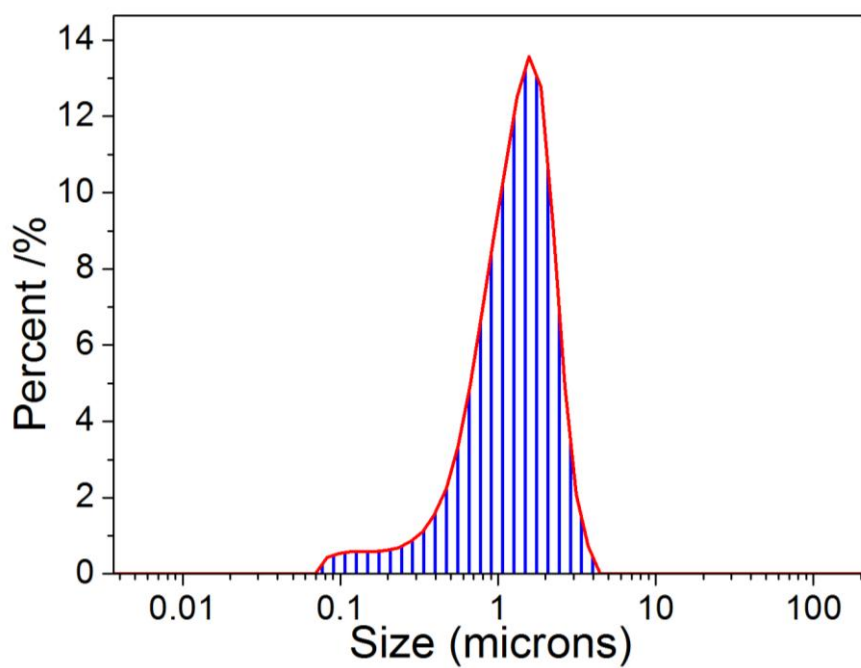


Fig. S3 Size distribution curve of the octahedral WO_3 particles from zone B, synthesized at 1400 °C with an Ar gas flow rate of 2 L/min.

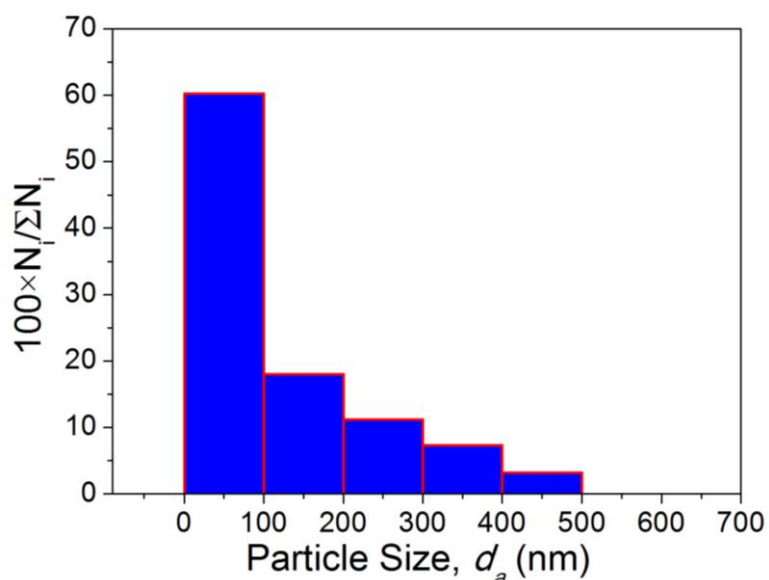


Figure S4 Size distribution curve of WO_3 particles from zone B, synthesized at 1350 °C with an Ar gas flow rate of 4 L/min.

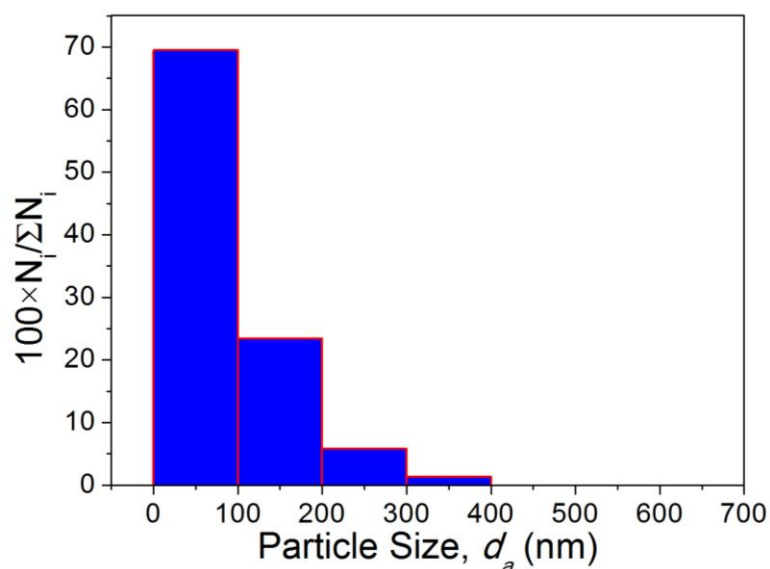


Fig. S5 Size distribution curve of WO_3 particles from zone C, synthesized at 1350 °C with an Ar gas flow rate of 6 L/min.

The size distribution curves in Figs. 45 and S5 here were obtained on the basis of the SEM images (Fig.5 in the manuscript) by using the **Image J** software. The average diameters (d_a) of the particles were calculated using the equation $\log d_a = \sum n \log d / \sum n$, where d corresponds to the diameter of approximately 1000 randomly sampled particles in the SEM image. Here, the average sizes of the particles from zone B and zone C were calculated to be 68 and 60 nm, respectively.

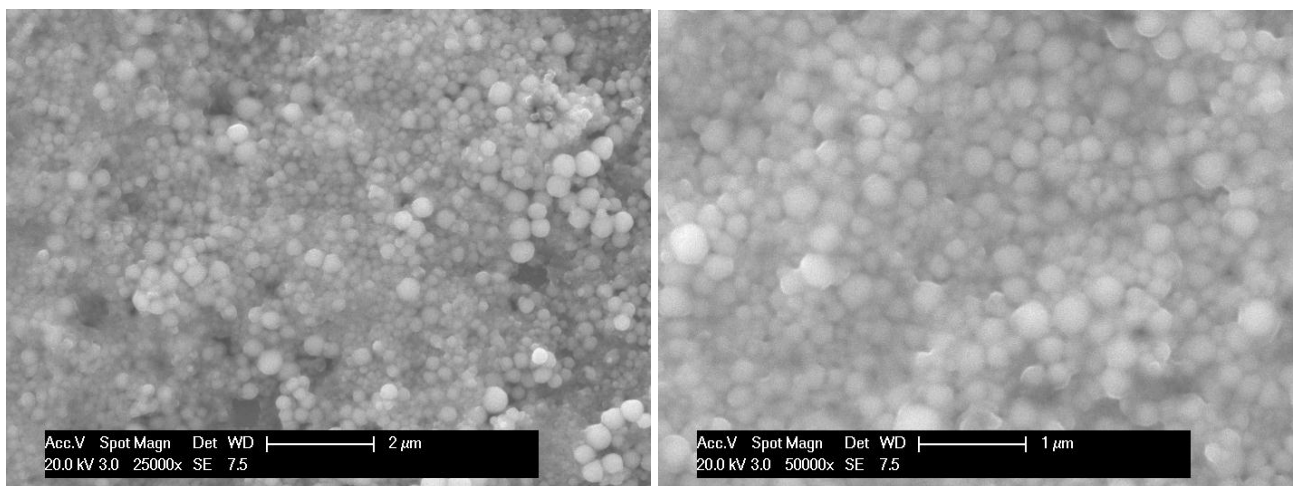


Fig. S6 SEM images of $\text{WO}_3\text{-S}$ film

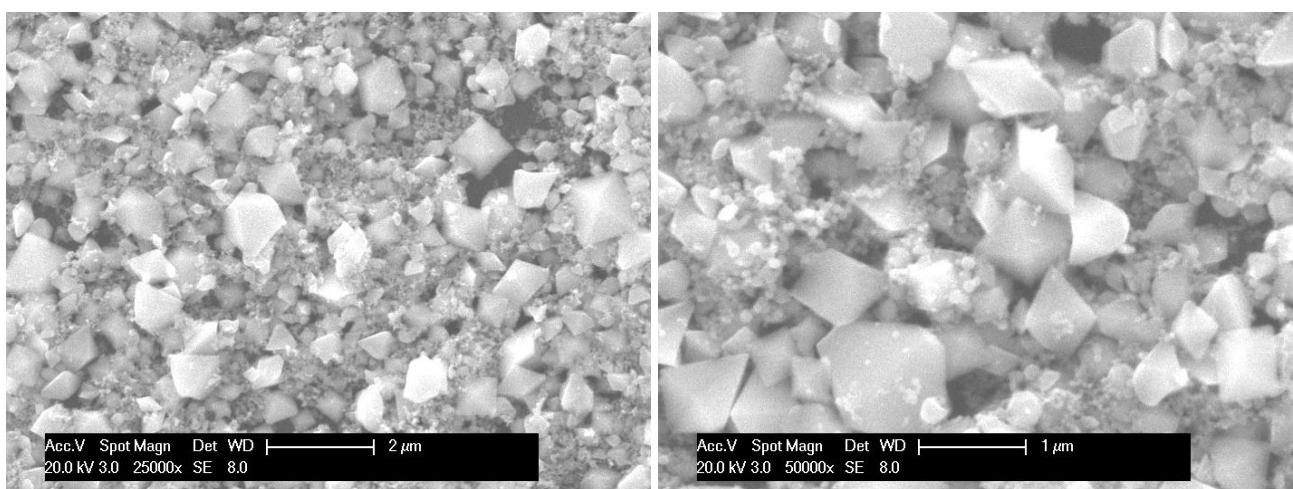


Fig. S7 SEM images of $\text{WO}_3\text{-O}$ film