

Supporting Information

for

Utilizing NaOH Promoter to Achieve Large Single-Domain Monolayer WS₂

Films *via* Modified Chemical Vapor Deposition

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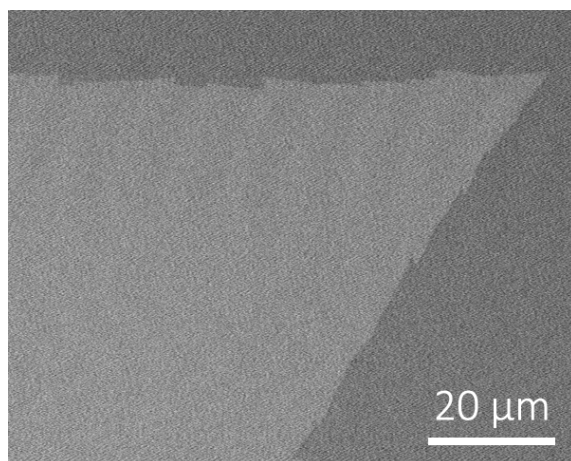


Figure S1. SEM image of a typical monolayer of triangular-shaped WS₂ flake. The edge of the flake is not smooth and sharp, but rather shows a sawtooth-like morphology.

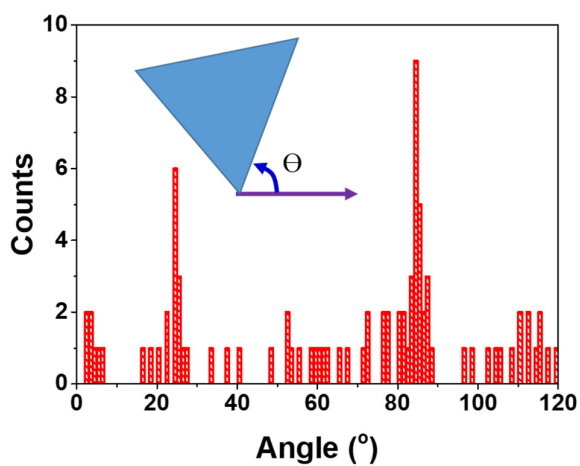


Figure S2. Intersection angles of the triangle WS₂ flakes with the horizontal line in Figure 1b in the main text. The inset shows the measured angle.

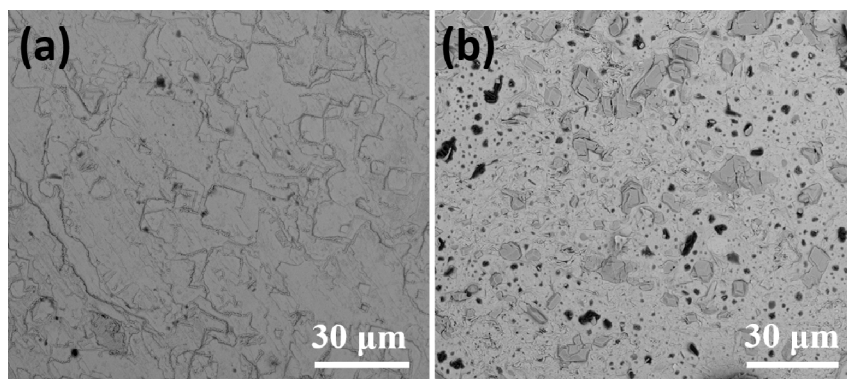


Figure S3. SEM images of W foil after the reaction. (a) Without NaOH and (b) with NaOH treatment.

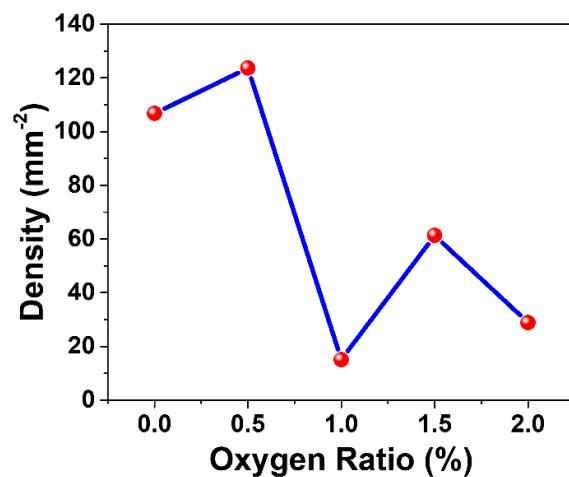


Figure S4. Nucleation density of WS₂ as a function of oxygen concentration (in volume ratio).

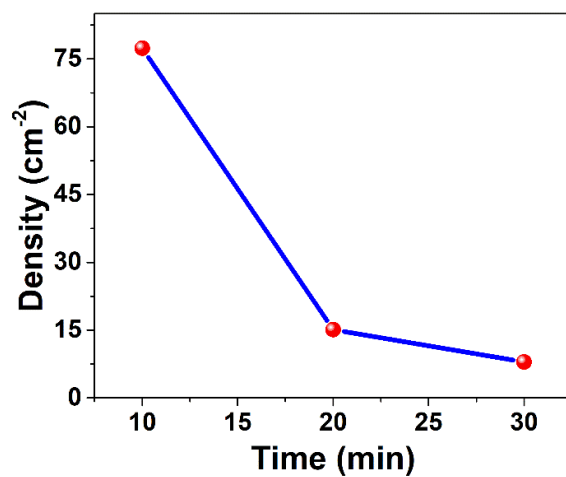


Figure S5. Nucleation density of WS₂ as a function of growth time.

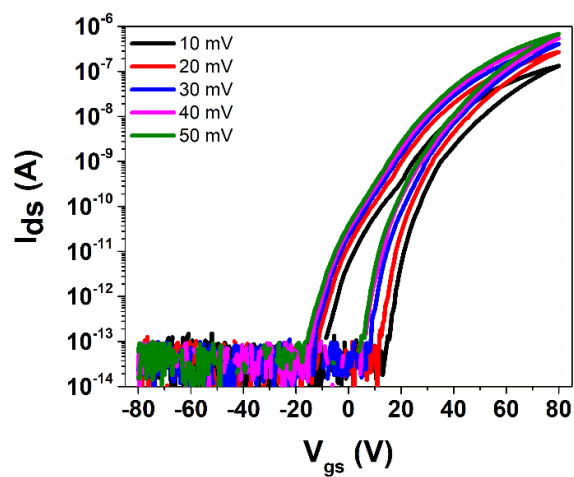


Figure S6. Log-plot of the transfer curves of the device.