

## Supporting Information

### Centimeter-Scale, Large-Area, Few-Layer 1T'-WTe<sub>2</sub> Films by Chemical Vapor Deposition and Its Long Term Stability in Ambient Condition

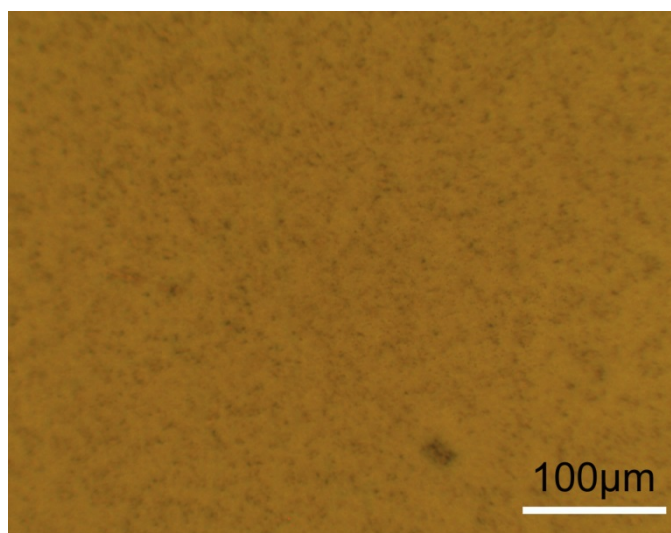
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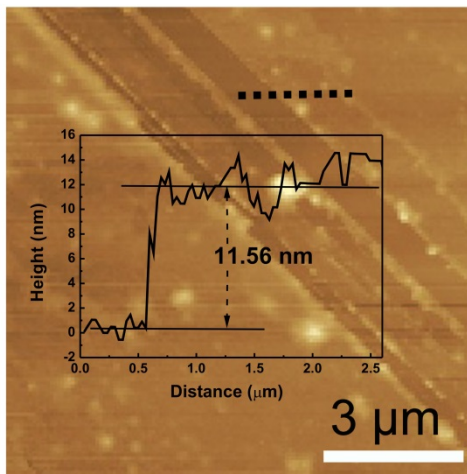
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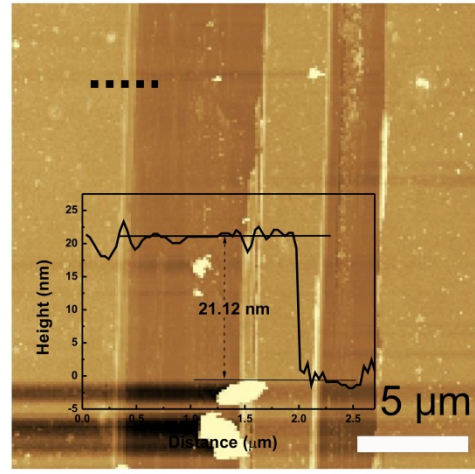


**Figure S1** The optical image of produced WTe<sub>2</sub> film when the substrate is faced up.

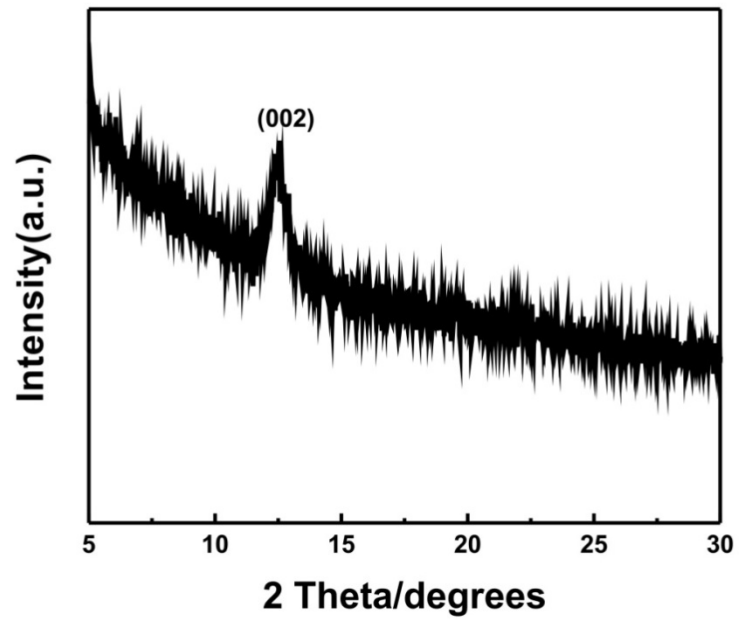
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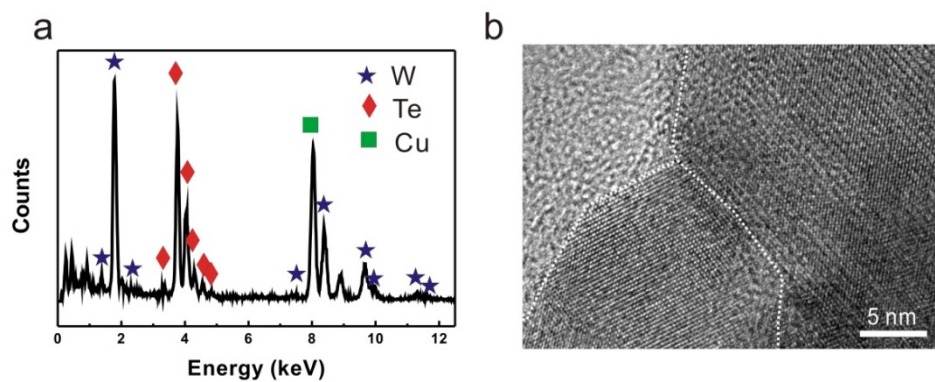
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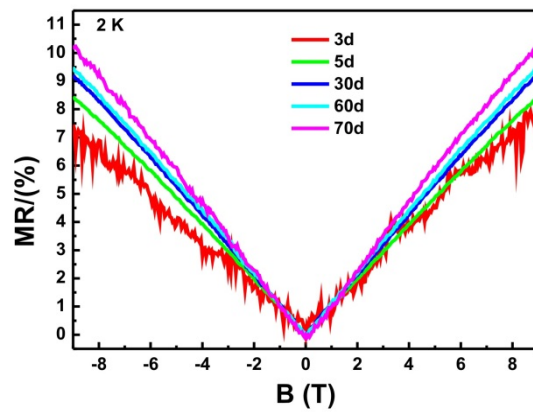
**Figure S2** AFM image from related thicker few-layer WTe<sub>2</sub> samples. The thickness is around a) 11.56 nm, b) 21.12 nm. The thickness of as-grown WTe<sub>2</sub> from ~6 nm to ~20nm.



**Figure S3** XRD pattern of few-layer  $\text{WTe}_2$ . The pattern shows one only diffraction peak at  $\sim 12.5^\circ$  for  $2\theta$  from the (002) plane, indicating a c-axis orientation.



**Figure S4** a) the energy-dispersive X-ray spectroscopy of prepared  $WTe_2$ . b) HRTEM image of  $WTe_2$ , grain boundaries are plotted with white dash lines.



**Figure S5** Exposure time dependent MRs for the relatively thicker WTe<sub>2</sub> sample under 2K.