materials

Supplementary Materials: Surface-Bound and Volatile Mo Oxides Produced During Oxidation of Single MoS_2 Crystals in Air and High Relative Humidity

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Below, we produce several more examples of scratching out a thin oxide layer during contact-mode AFM scanning at room temperaturę from previously thermally oxidized single MoS_2 flakes.

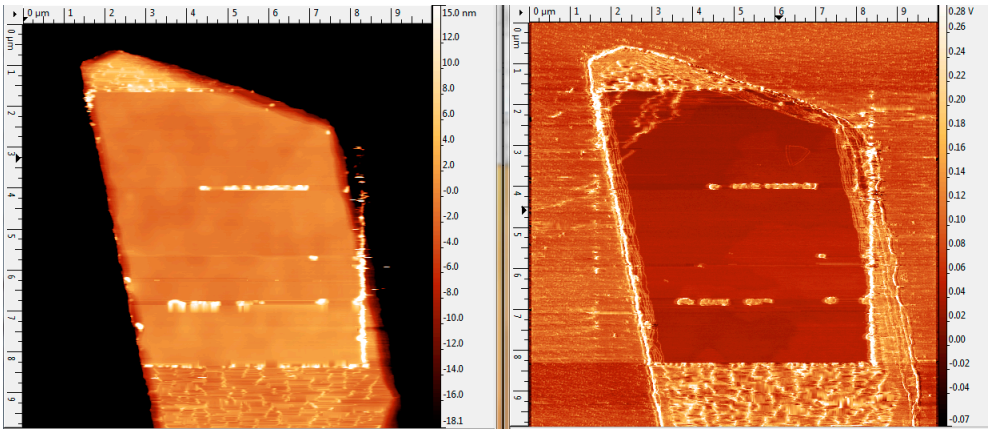

Figure S1. An example of creating ripples and scratching out an already fragmented oxide layer (due to extensive heating). Left: topography; Right: twice the uncalibrated friction.

AFM contact mode imaging, 10 μm by 10 μm. In the central zone of the MoS_2 flake heated extensively at 350 °C 6.6 μm by 6.6 μm area has been scratched out at room temperature. Figure S2 shows the progression of scratching out the oxide layer.

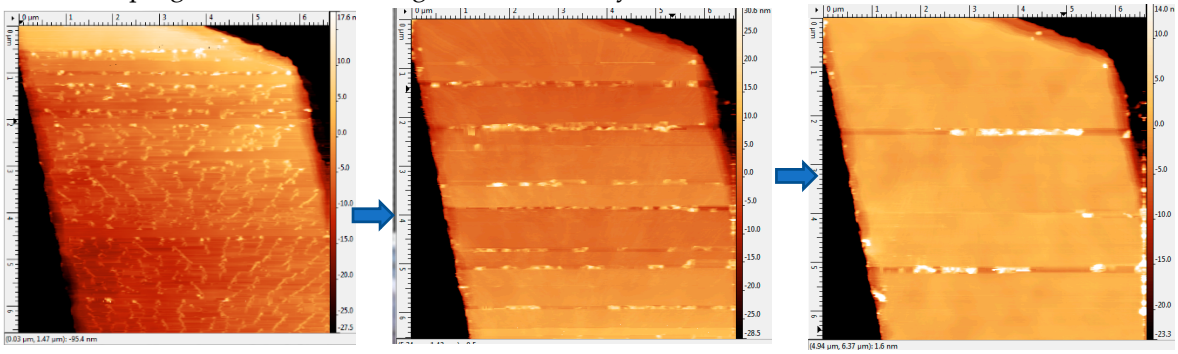

Figure S2. Progression of the process of removing already loosely bound oxides from the flake in Figure S1. Presented are 6.6 μm by 6.6 μm AFM contact mode topography images.