

Supplementary Information

Interaction of gases with monolayer WS_2 : An In Situ Spectroscopy Study

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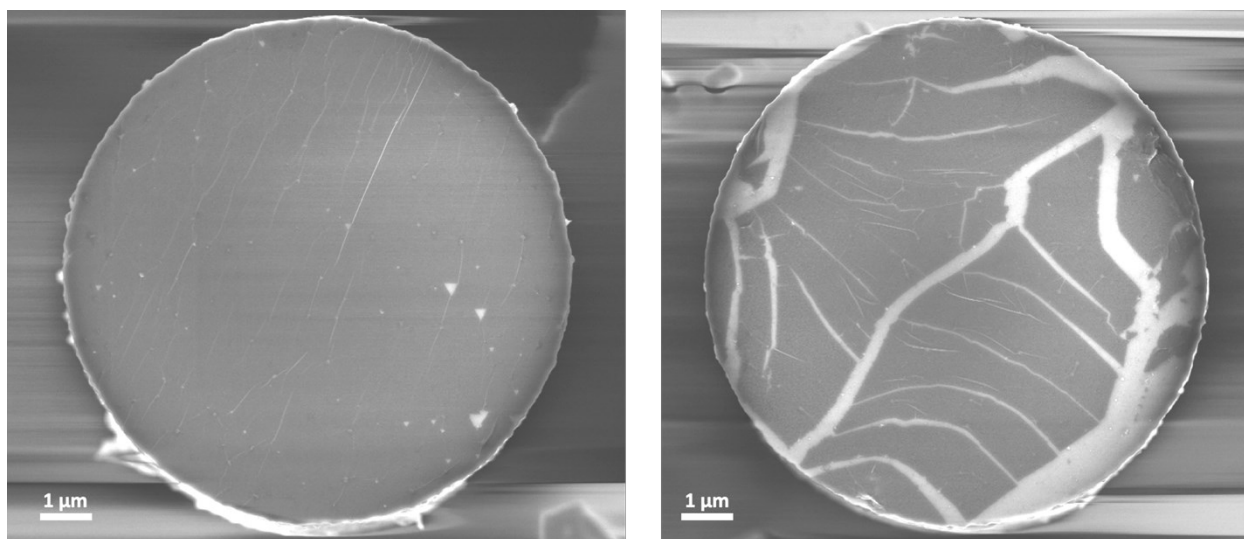


Fig. S1. SEM images of monolayer CVD-grown monolayer WS_2 transferred onto the ARES micropillars. Examples are shown of fully and partially coated micropillars, to highlight the contrast between the WS_2 and the silicon.

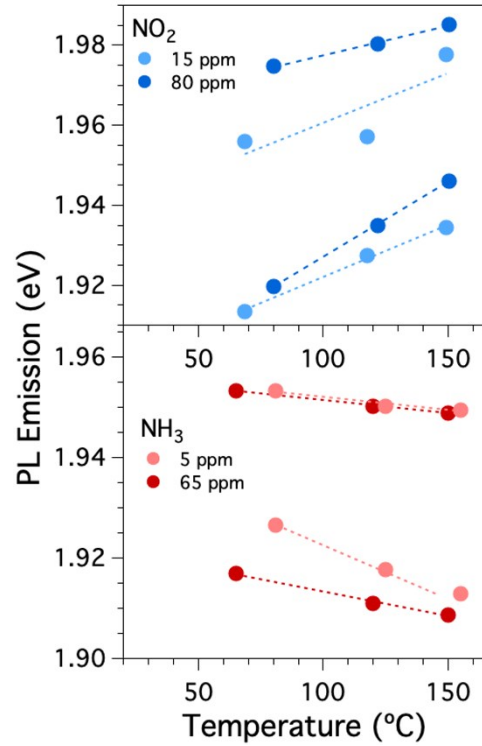


Fig. S2. Exciton and trion emission energies as a function of temperature for exposure of monolayer WS₂ to NO₂ (top panel) and NH₃ (bottom panel).

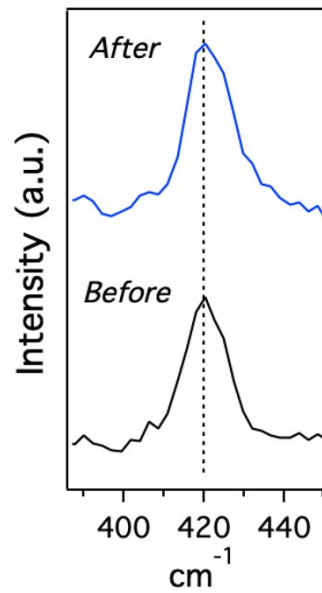


Fig. S3. Raman spectrum in the A_{1g} peak region, collected before and after exposure to 80 ppm NO₂ at 120 °C.