



Technical Data Sheet

ACS Material Monolayer Tungsten Disulfide (Powder and Dispersion)

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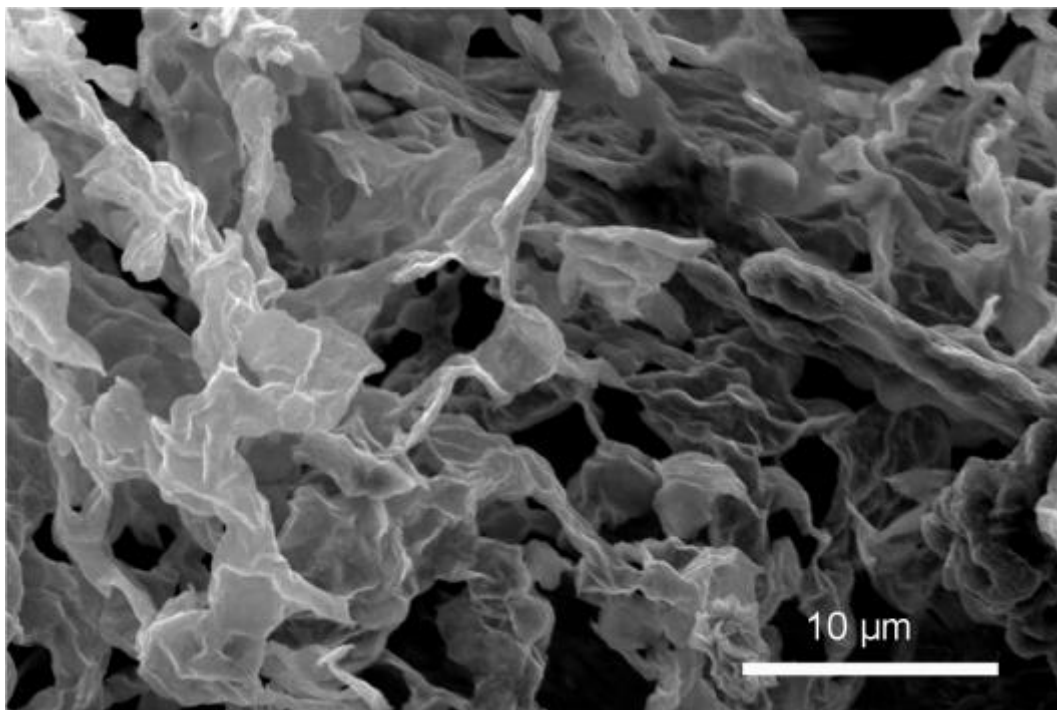
Revision: 030117

1. Preparation Method

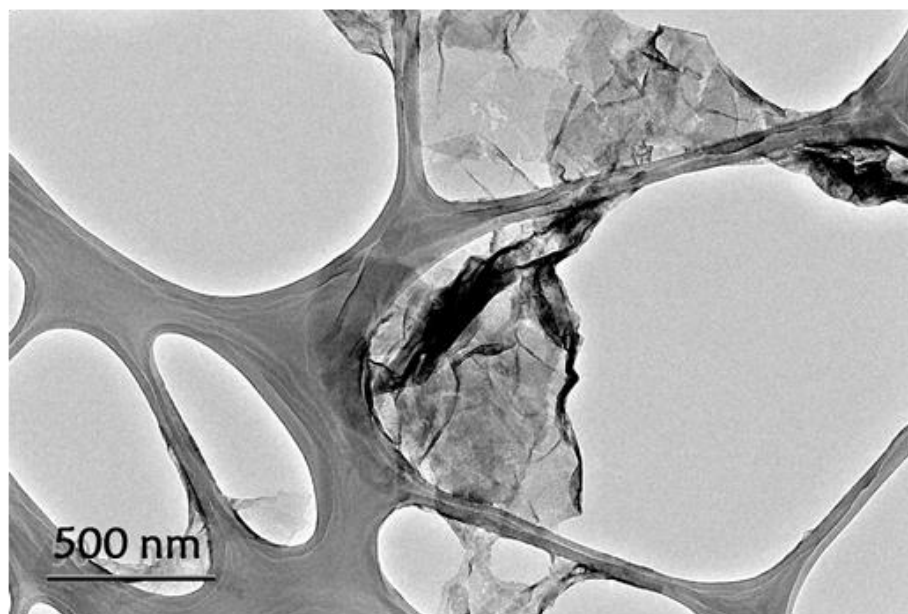
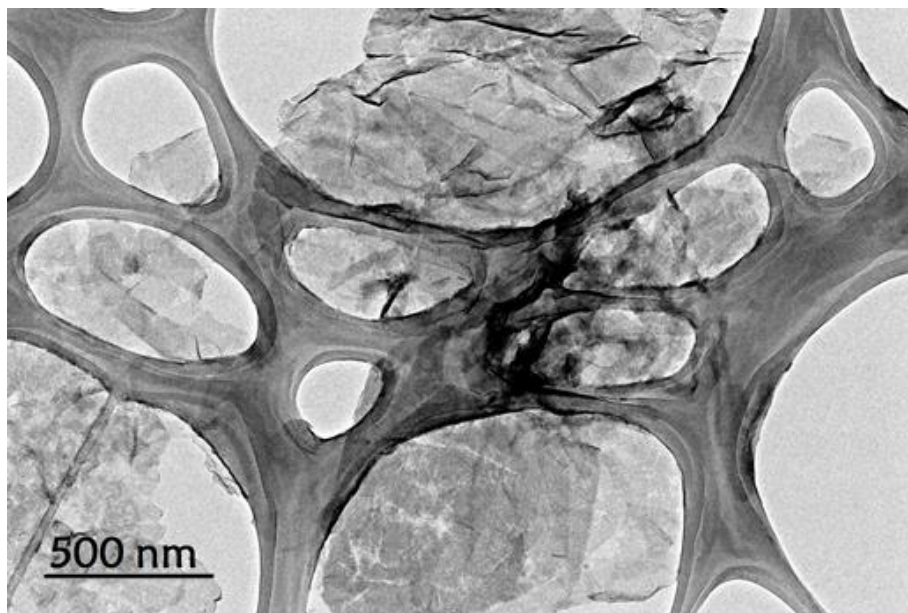
Lithium-based Intercalation Method

2. Characterizations

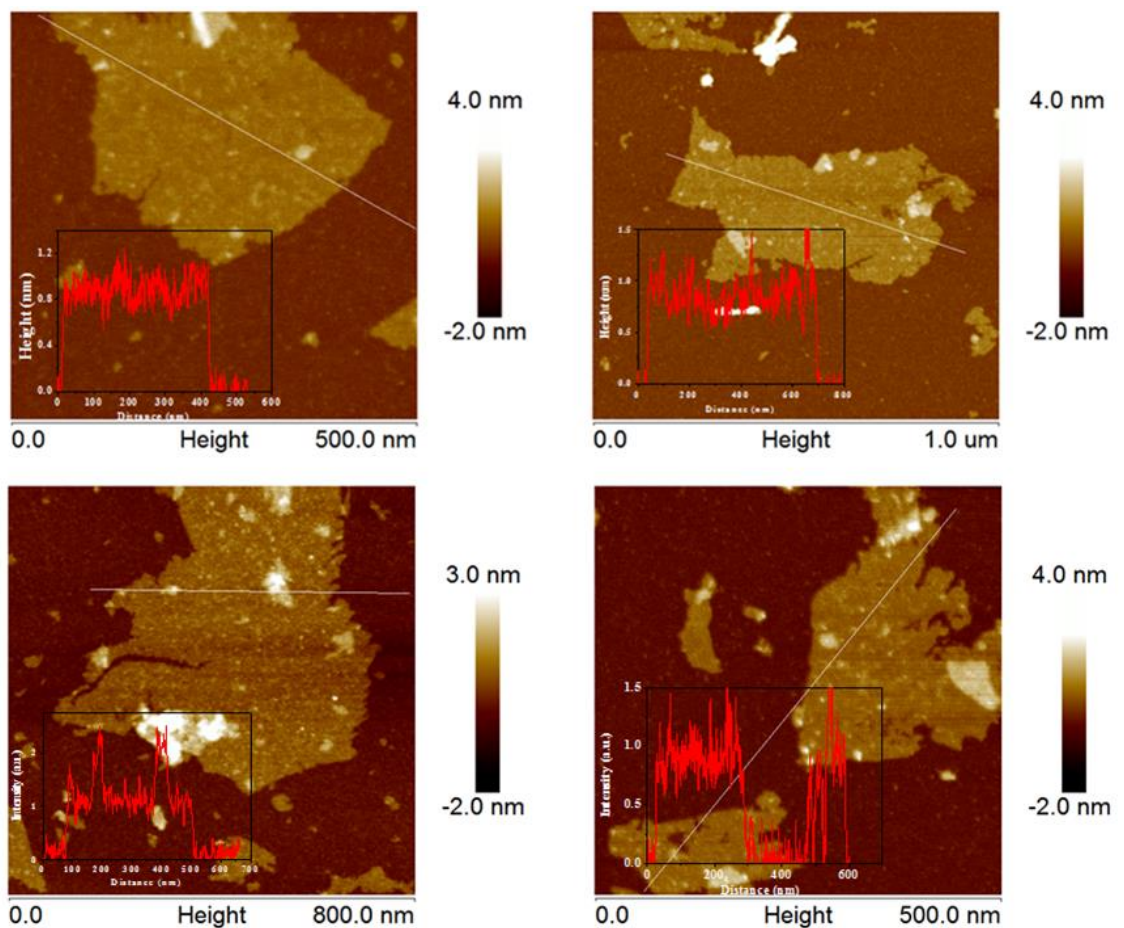
Composition: Monolayer Tungsten disulfide
Appearance: Black Powder or dispersion
Diameter: 0.1-4 μm
Thickness: ~ 1 nm
Monolayer ratio: $\geq 90\%$



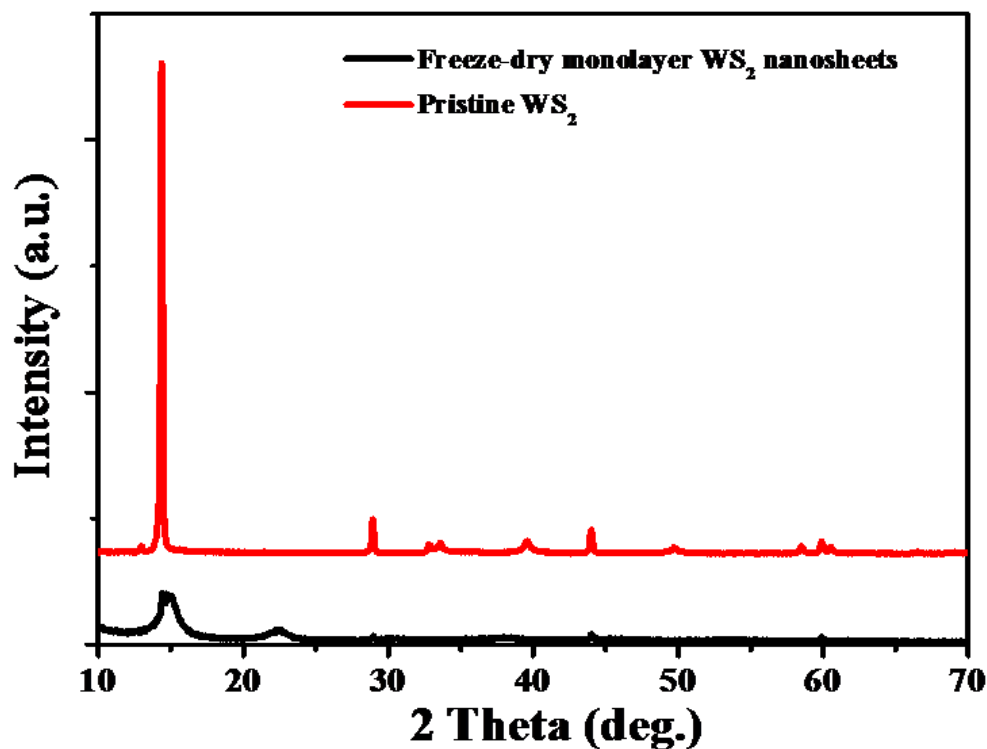
SEM Image (1) of ACS Material Monolayer Tungsten Disulfide



TEM Image (2) of ACS Material Monolayer Tungsten Disulfide



AFM Image (3) of ACS Material Monolayer Tungsten Disulfide



XRD Results (4) of ACS Material Monolayer Tungsten Disulfide

3. Application Fields

Transistor, sensor, photocatalytic, electronic device.

Monolayer Tungsten disulfide will be supplied as powder or dispersion, and it has good solubility in water and ethanol. The dispersion concentration of Monolayer Tungsten disulfide with small diameter in water will be adjustable in 0.1mg - 1 mg/ml. If you have any questions, please contact us, and we will try our best to provide the solutions for you.

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