



Technical Data Sheet

ACS Material Nano Size Monolayer Molybdenum Disulfide (Powder and Dispersion)

Table of Contents

[1 – Preparation Method](#)

[2 – Physical and Chemical Properties](#)

[3 – Application Fields](#)

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1. Preparation Method

Lithium-based Intercalation Method

2. Characterizations

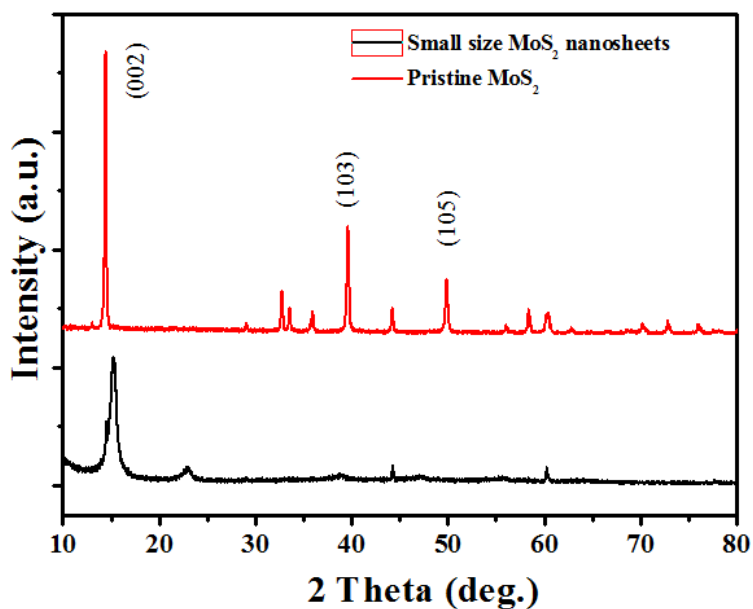
Composition: Monolayer Nano Molybdenum Disulfide

Appearance: Black Powder or Dispersion

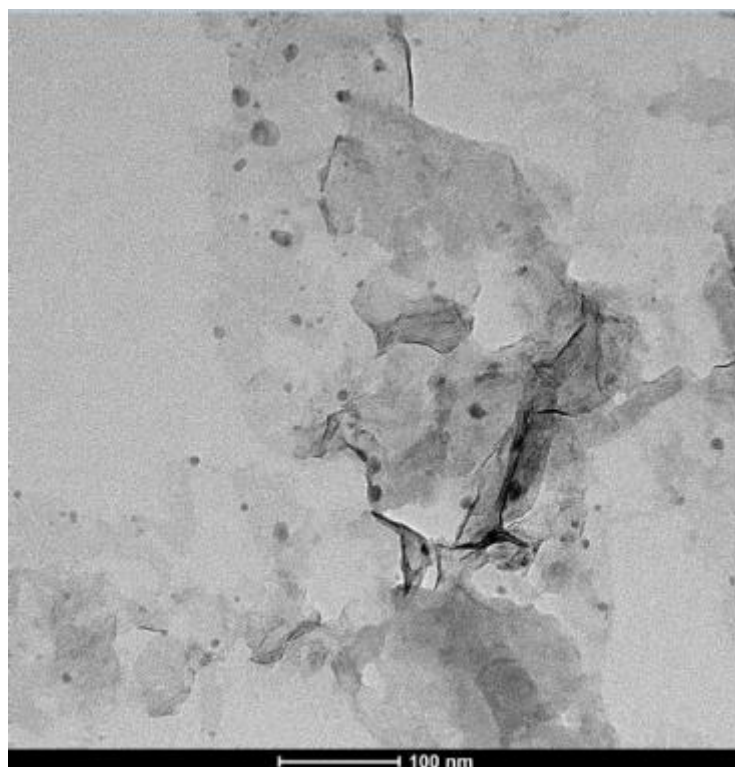
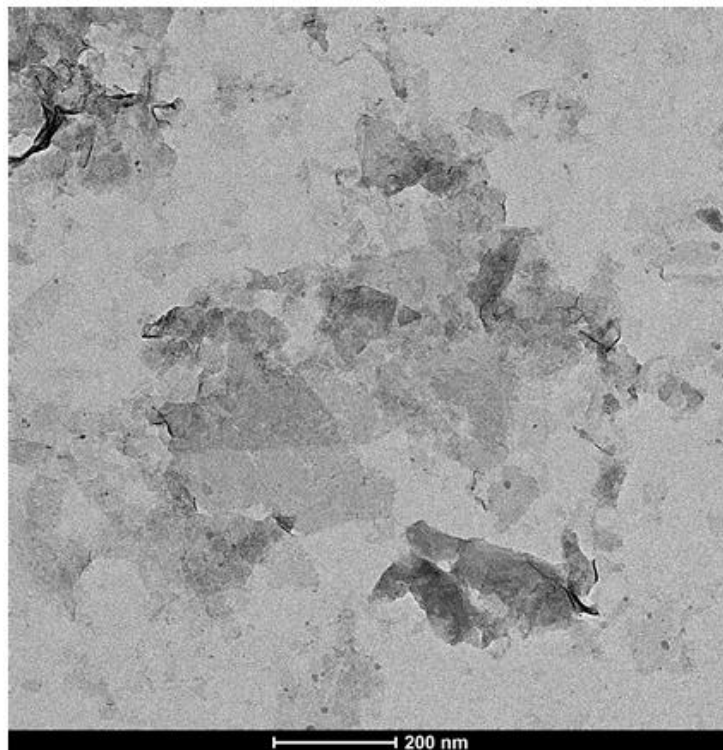
Diameter: 20-500 nm, mainly concentrate in 100-200 nm

Thickness: ~ 1 nm

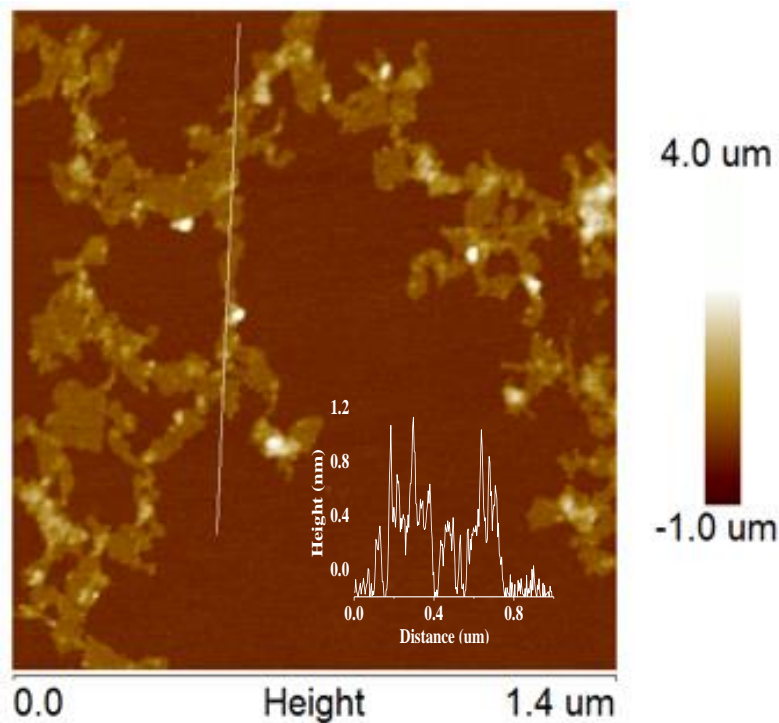
Monolayer ratio: $\geq 90\%$



XRD (1) of ACS Material Monolayer Nano Molybdenum Disulfide



TEM Image (2) of ACS Material Monolayer Nano Molybdenum Disulfide



AFM Image (3) of ACS Material Monolayer Nano Molybdenum Disulfide

3. Application Fields

Secondary batteries, field-effect transistors, sensors, organic light-emitting diodes, memory.

Monolayer Nano Molybdenum disulfide will be supplied as powder or dispersion, and it has good solubility in water and ethanol. The dispersion concentration of Monolayer Nano Molybdenum disulfide in water will be adjustable in 0.1mg- 5 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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