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## PATENT STATUS

excitation, plasmonic antenna

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**Fig 1.** RE-TERS mapping of a chemical vapor deposition-grown molybdenum disulfide (MoS<sub>2</sub>) monolayer flake. (a) atomic force microscopy image of the MoS<sub>2</sub> flake on an ultrasmooth gold substrate with the line-scan shown in (b). The markers indicate the edge of the MoS<sub>2</sub> flake (green) and two wrinkles (light blue and orange).

APPLICATIONS

The probe may be used

- ▶ with Raman-Spectroscopy imaging equipment to upgrade the image quality
- ▶ in applications where high resolution and sensitivities are needed, for example, in near-field scanning, optical imaging, and sensing

RELATED MATERIALS

- ▶ [Xuezhi Ma, et. al. Toward High-Contrast Atomic Force Microscopy-Tip-Enhanced Raman Spectroscopy Imaging: Nanoantenna-Mediated Remote-Excitation on Sharp-Tip Silver Nanowire Probes. Nano Letters 2019 19 \(1\), 100-107 - 12/04/2018](#)

RELATED TECHNOLOGIES

- ▶ [High External-Efficiency Nanofocusing for Lens-Free Near-Field Optical Microscopy](#)

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