

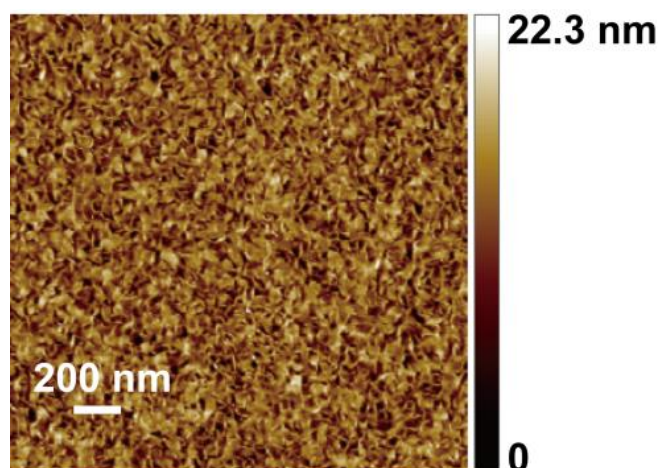
## Supplementary Information for

### Molybdenum Nanoscrews: A Novel Non-Coinage-Metal Substrate for Surface-Enhanced Raman Scattering

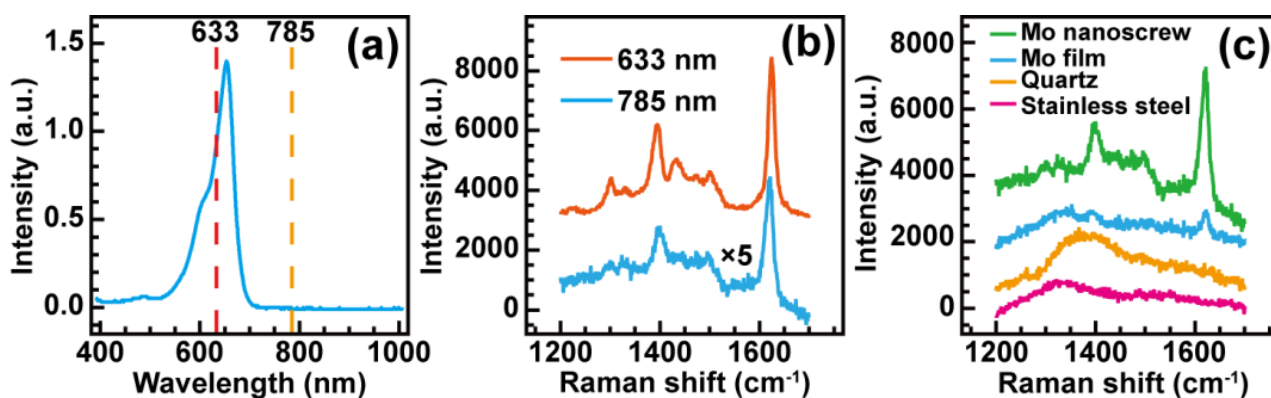
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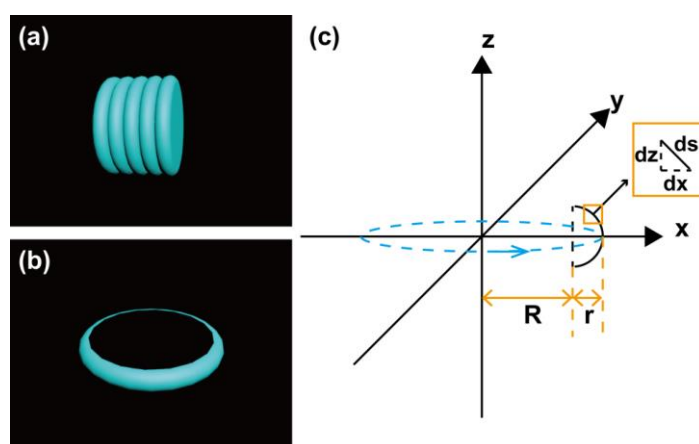
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**Fig. S1** AFM topography of the as-prepared Mo thin film.



**Fig. S2** Raman characterizations using the 785-nm laser as the excitation source. **a** Optical absorption spectrum of the MB molecule. The excitation laser wavelengths at 633 nm and 785 nm are indicated by the dashed lines, respectively. **b** Comparison of the Raman spectra of MB molecules ( $10^{-4}$  M) adsorbed onto the Mo nanoscrews using excitation wavelengths of 633 nm and 785 nm. **c** Raman spectra of MB molecules ( $10^{-4}$  M) adsorbed onto the Mo nanoscrews, Mo thin film, quartz, and stainless steel. The excitation wavelength was 785 nm



**Fig. S3** **a** Schematic showing the structure of an individual Mo nanoscrew, where the nanoscrew is modeled as casks stacking along its length direction. **b** Close view of a cask. **c** Scheme for the calculation of the surface area of an individual cask