Supporting Information for:

Fabrication of Smooth Patterned Structures of Refractory Metals, Semiconductors, and Oxides via Template Stripping

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Supplemental Figures

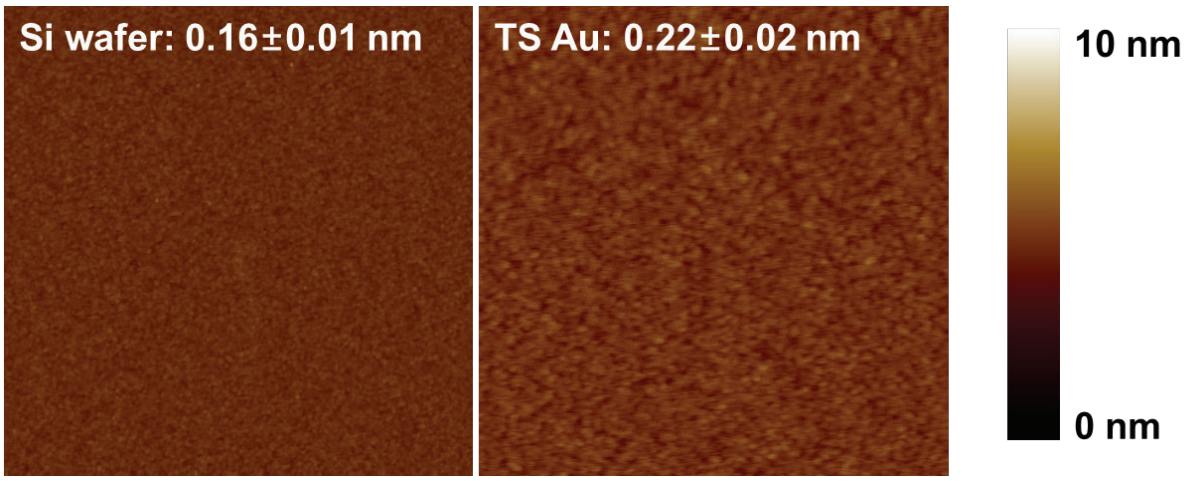

Figure S1. AFM images of the silicon (Si) wafer (left panel) and a gold (Au) film template-stripped (TS) from it (right panel). For each surface the root-mean-square roughness is provided: 0.16 and 0.22 nm, respectively. The Au film is 20 nm thick. The scanned areas are $2.5 \times 2.5\ \mu m^2$.

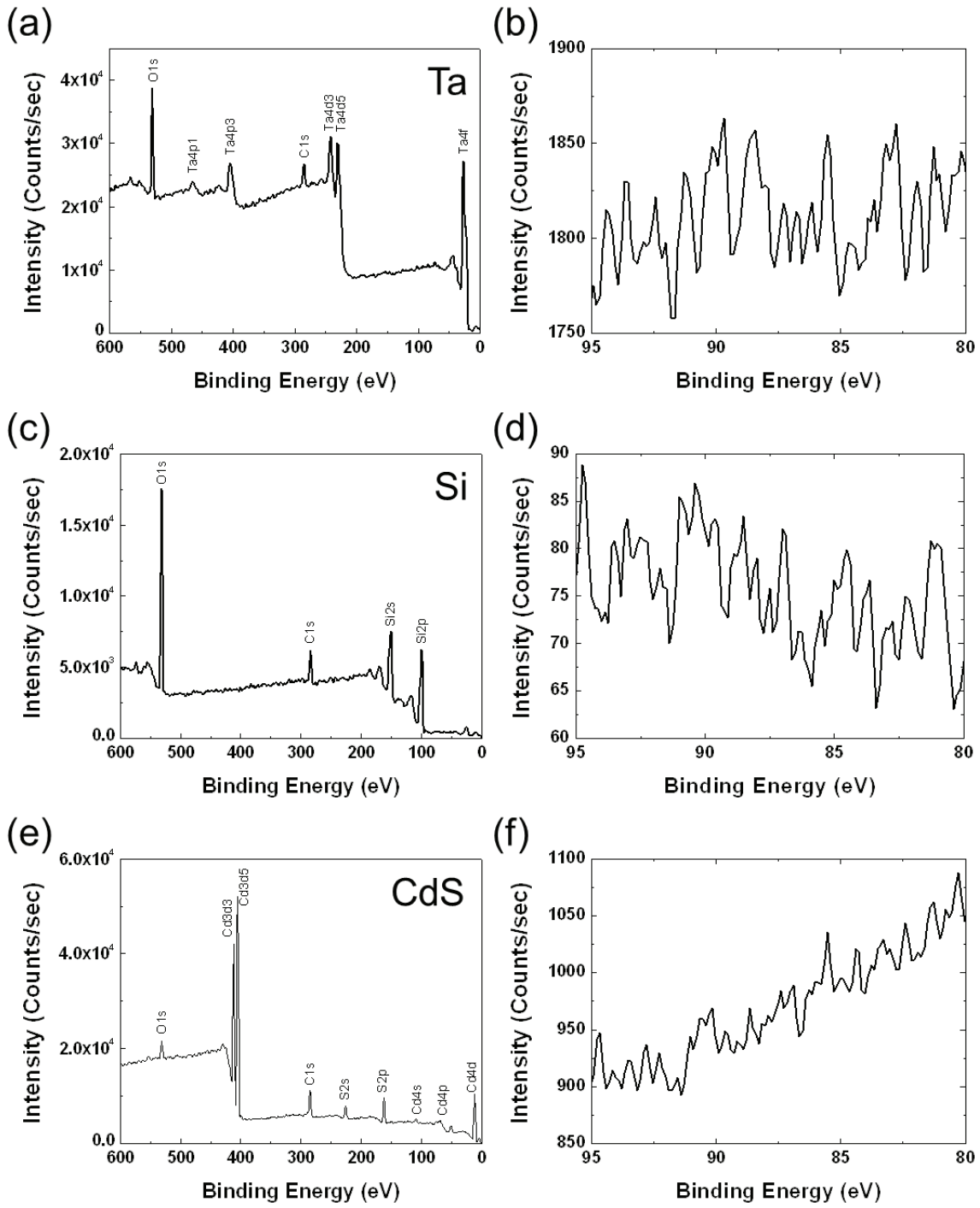

Figure S2. XPS spectra for the template-stripped surfaces of tantalum (Ta), silicon (Si), and cadmium sulfide (CdS) films. A wide-scan survey spectrum of the template-stripped (a) Ta, (c) Si, and (e) CdS films. Each image contains the peak annotation. A high-resolution spectrum of the template-stripped (b) Ta, (d) Si, and (f) CdS films for detecting Au 4f peaks. Au peaks were not observed.

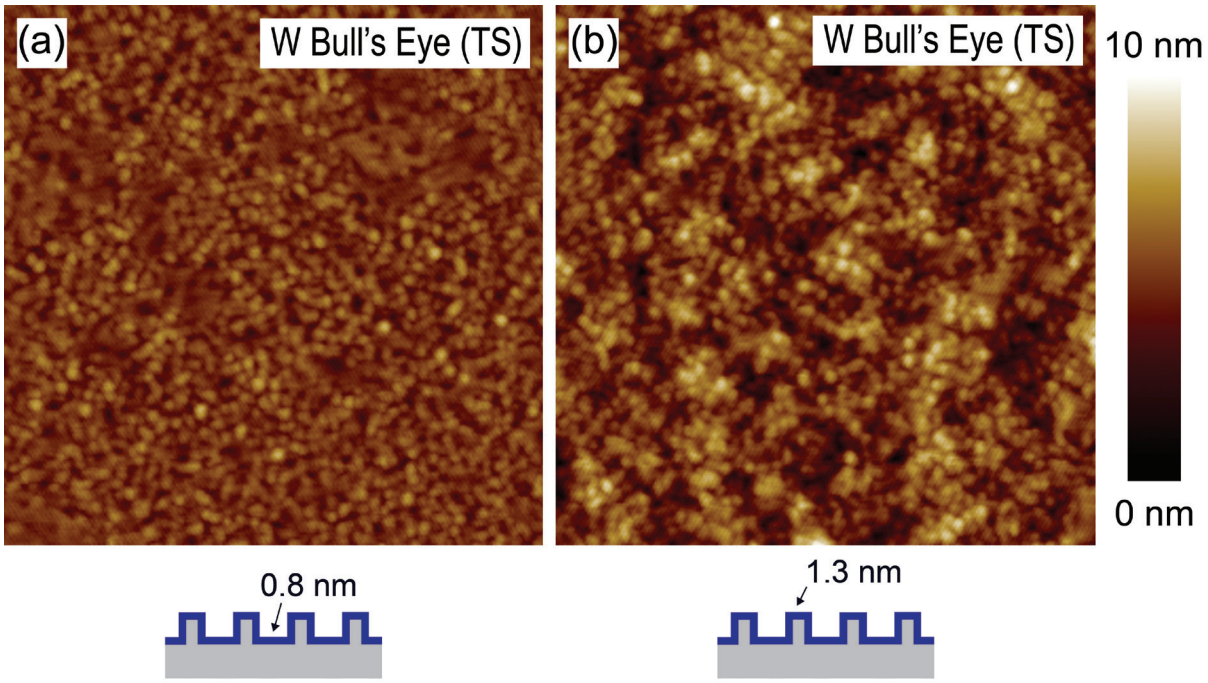

Figure S3. AFM images of template-stripped (TS) tungsten (W) bull's eye structures. The surfaces of (a) the groove and (b) the top flats were separately characterized. These surfaces exhibited a root-mean-square roughness of ca. 0.8 and 1.3 nm, respectively. The scanned areas are 1×1 μm^2.

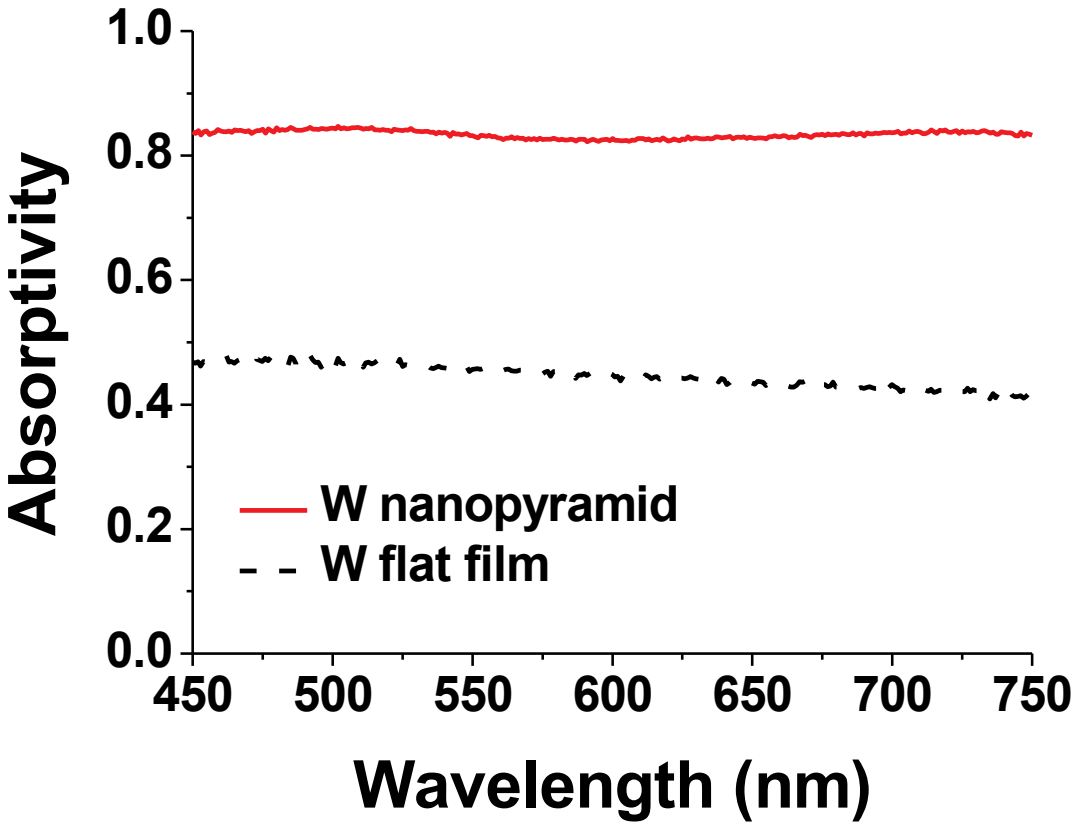

Figure S4. Absorption spectra for tungsten (W) nanopyramid films fabricated by template stripping and flat tungsten films. Here, absorptivity is estimated from 1-*R*, where *R* is the reflectivity. Thus, this neglects the effect of any high-angle scattering that is not collected by the high-numerical-aperture (0.9) objective used in the experiment.