



## Supplementary Materials

# Highly regular hexagonally-arranged nanostructures on Ni-W alloy tapes upon irradiation with ultrashort UV laser pulses

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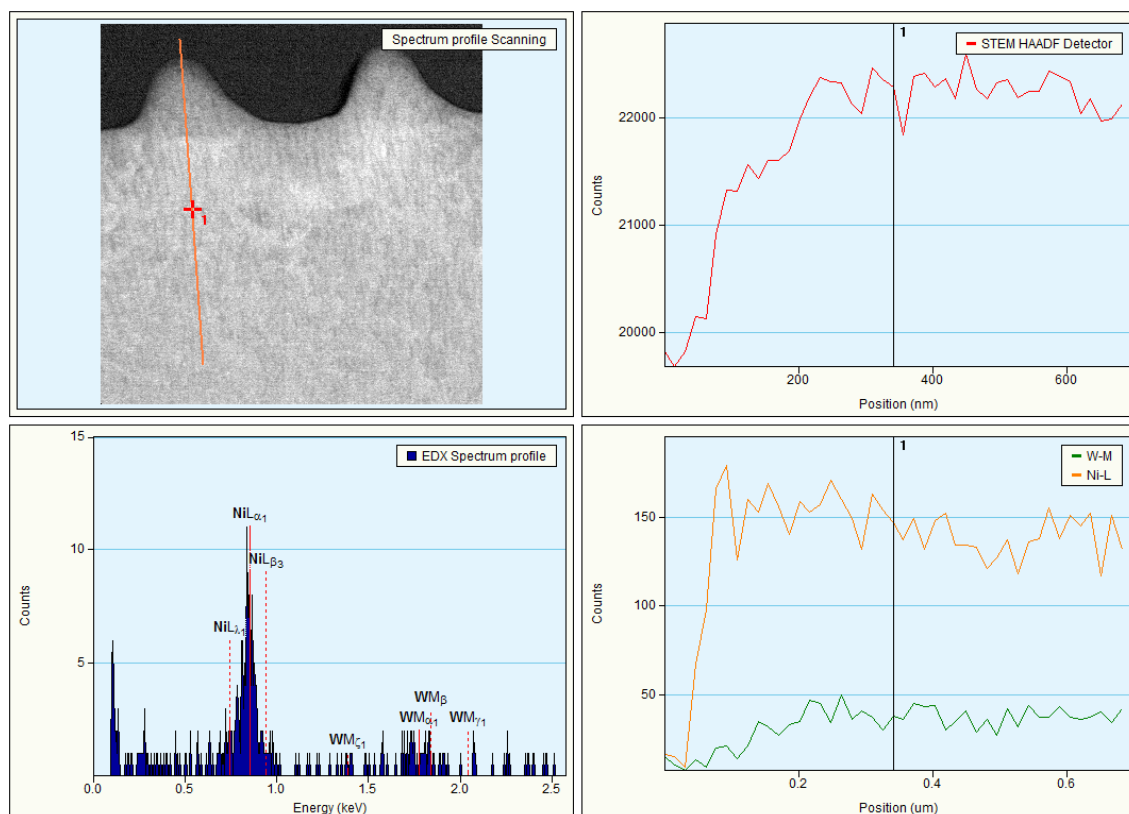
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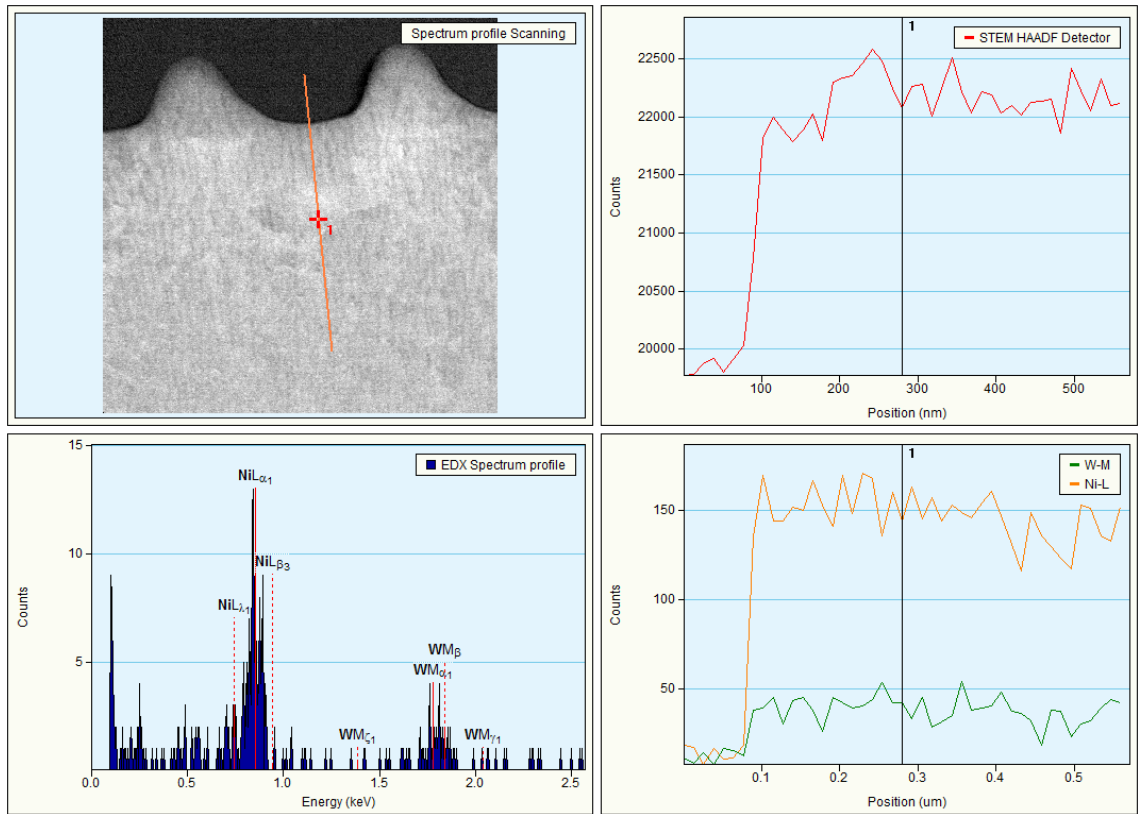
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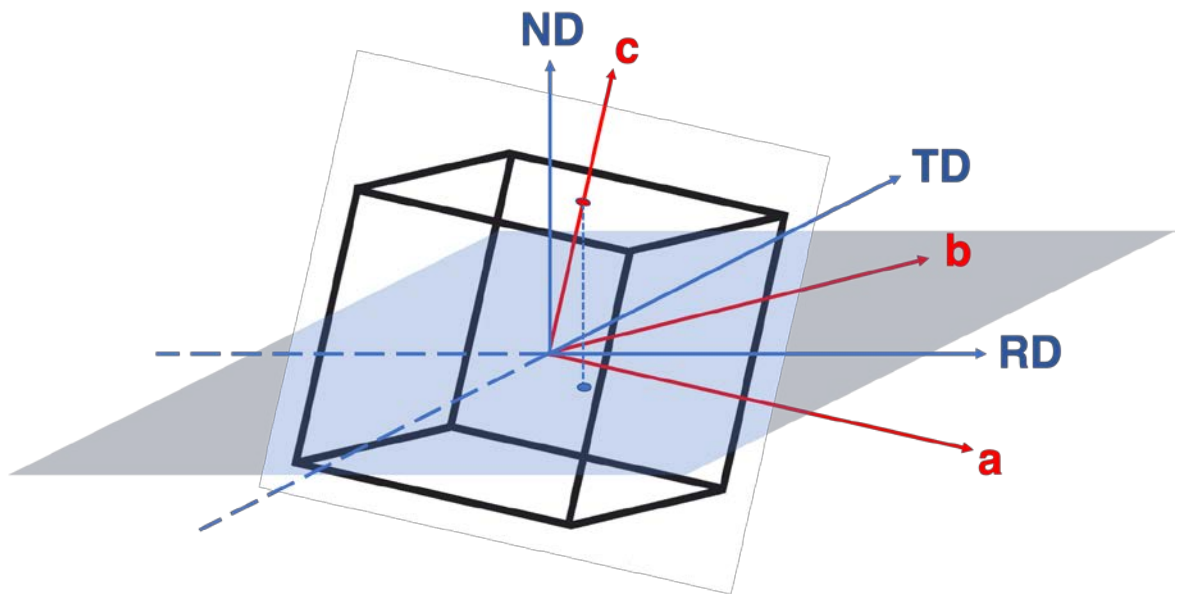
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**Figure S1.** EDS line profiles showing that the W content increases from the top part of a nanoprotusion of A3 type. The label “W-M” denotes the signal integrated over the tungsten W-M $\alpha^1$  line at 1.77 keV, while the label “Ni-L” denotes the signal integrated over the nickel Ni-L $\alpha^1$  line at 0.85 keV shown in the lower part of the figure.



**Figure S2.** EDS line profiles in the regions between nanoprotusions of A3 type.



**Figure S3.** Scheme of the crystallographic projections used to build Figure 11. RD and TD define the plane of the tape surface, ND is the normal direction. The cube shows the crystallographic grain orientation with the particular a, b and c directions. Taking the reference origin at the center of the cube, the points indicated in Figure 11 are the projections over the tape plane of the center of the upper side of the cube. The blue point indicated in this scheme is one of the projected points encoded in Figure 11 for a specific grain.