

Figure 1. Left: Schematics of self-aligned polymer etching and the subsequent film patterning through area-selective deposition and lift-off processes. Right: SEM images of the starting pattern of Pt/SiO<sub>2</sub> and the same after the area-selective etching of PMMA followed by ALD of Ni and removal of PMMA. TEM image after the area-selective etching of polyimide followed by ALD of Ir without removing the polyimide.

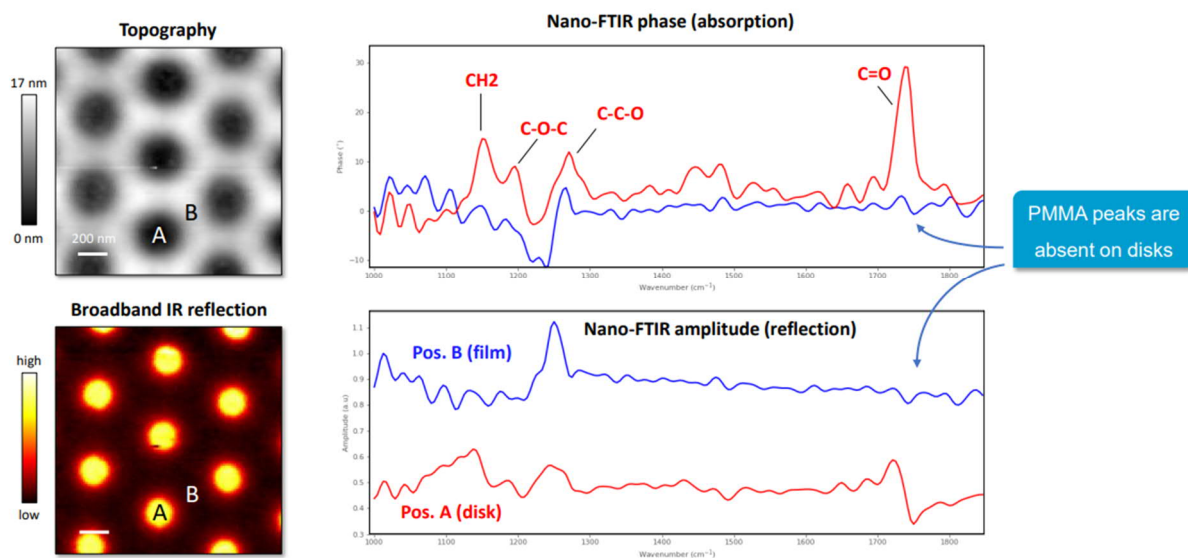


Figure 2. Nano-FTIR verification of selective removal of PMMA from Pt dots. Left: Topography image and infrared broadband reflection image (white light image). Scale bar 200 nm. Right: nano-FTIR phase spectrum showing characteristic absorption lines of PMMA (upper panel, red curve) which are absent on the Pt dots (blue curve). Analogous nano-FTIR amplitude spectrum showing the sample reflection (lower panel).