First Layer Compression and Transition to Standing Second Layer of Terephthalic Acid on Cu(100)

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Line profiles

Below are images with line profiles. The data in the line profiles and images have not been smoothed, but planar background subtractions have been applied to the images.

Figure S1. Image shown in Figure 3 with line profile along gray line indicated. The line profile includes three step edges of height 6.5 Å, 6.6 Å, and 6.8 Å, measured by averaging multiple points above and below each step edge.
Figure S2. STM image from Fig. 3(a) with line profile. Height of TPA second layer islands is larger than that of TPA-covered Cu step edges.
Figure S3. STM image from Fig. 3(b) with line profile.
Figure S4. STM image from Fig. 2(a) with line profile. TPA island heights for second layer TPA is 3.0-3.5 Å.
Fig. S5. X-ray photoelectron spectroscopy of TPA deposition great than a full layer on Cu(100). Bottom trace is the as-deposited TPA at room temperature, then subsequent annealing treatments moving up the plot: 100 C for 10 min., 150 C for 7 min., 150 C for an additional 66 min., and 150 C for an additional 1 minute.