Organic/inorganic epitaxy: commensurate epitaxial growth of truxenone on Cu (111)


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Supporting Information

LEED patterns captured off specular to determine surface structure S1
LEED patterns: modelled patterns and surface meshes S2
STM images with FFT S3
Figure S1 – Measured LEED patterns (54eV) of truxenone on Cu (111) grown at (a)(c) 4 minutes and (b)(d) 7 minutes. (a) and (b) are captured with the specular beam highlighted in red and the first order spots of the Cu (111) surface highlighted in blue. These patterns were used for surface structure determination.
Figure S2- Measured LEED patterns (20eV) of truxeneone grown on Cu (111) for (a) 4 minutes and (b) 7 minutes. Matching simulated LEED patterns show a (c) p(8x8) and (d) p(5x5) surface structure. Real space surface meshes corresponding to (e) p(8x8) and (f) p(5x5) are shown with primitive lattice vectors marked in red and the Cu (111) surface mesh marked in grey.
Figure S3 - Measured LEED patterns (20eV) of truxenone grown on Cu (111) for (a) 4 minutes, (b) 5.5 minutes and (c) 7 minutes with their corresponding STM and 2-D FFT images shown in (d)(g) 4 minutes, (e)(h) 5.5 minutes and (f)(i) 7 minutes.