

Engineering Two-Dimensional Hybrid NaCl-Organic Coordinated Nanoarchitectures on Metal Surface

Jérémy Hieulle,^a David Peyrot,^a Zhen Jiang,^a and Fabien Silly*,^a

^a CEA, IRAMIS, SPEC, TITANS, CNRS UMR 3680, F-91191 Gif sur Yvette, France. Fax: +33 16908 8446; Tel: +33 16908 8019; E-mail: fabien.silly@cea.fr

SUPPORTING INFORMATION

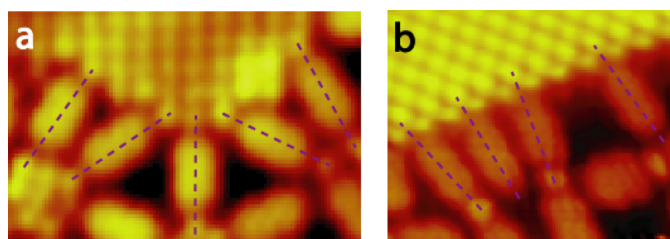


Figure S1 : STM images of PTCDI - NaCl (100) island boundary. (a) NaCl single layer island $V_s= 1.2$ V, $I_t=0.6$ nA, 5×3 nm²; (b) NaCl double-layer island, $V_s= 1.3$ V, $I_t=0.18$ nA, 5×4 nm². The molecular axis (dotted purple line) is superimposed to the STM image as a guide for the eyes.

The STM images suggest that NaCl is growing locally as a monolayer and double-layer films in the PTCDI domains. The STM images (Fig.S1) show that PTCDI molecules are aligned with the bright spots (position of Cl ions) of the NaCl single-layer island, Fig.S1(a). In contrast PTCDI molecules are aligned with the junction between two bright spots (position of Na ions in the NaCl second layer) of the NaCl double-layer island, Fig.S1(b). It therefore appears that in both case the PTCDI molecules are connected to a Cl ion of the NaCl first layer.