

An STM and XPS study

PTCDA+Fe/Au(111):

0-D nanodots

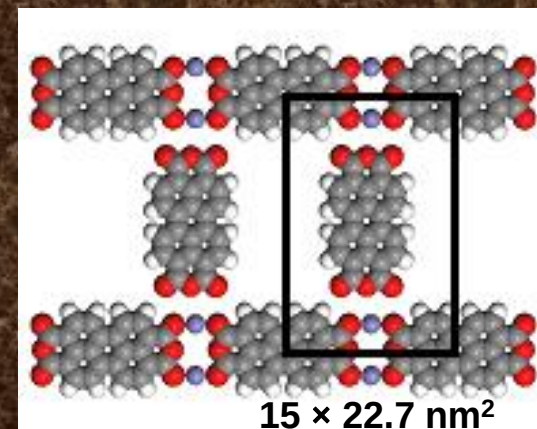
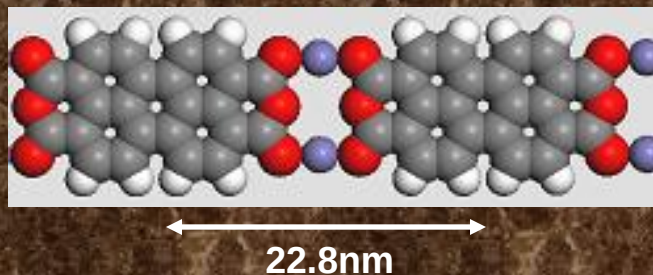
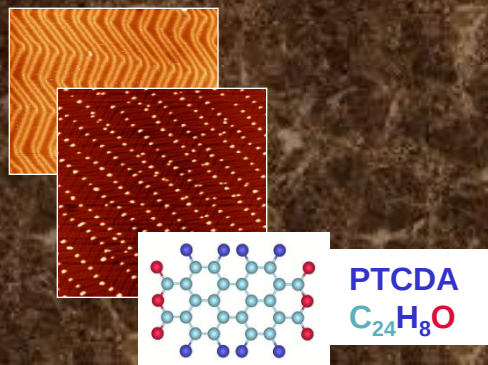
1-D molecular wires

2-D extended structure

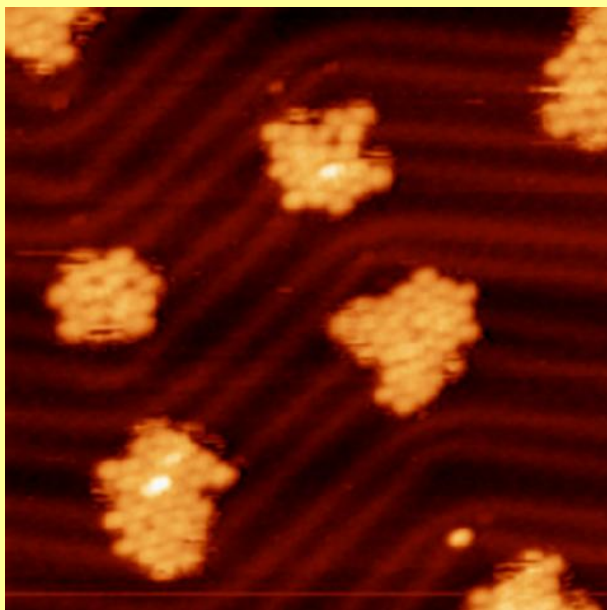
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ICMM-CSIC

STM STUDY

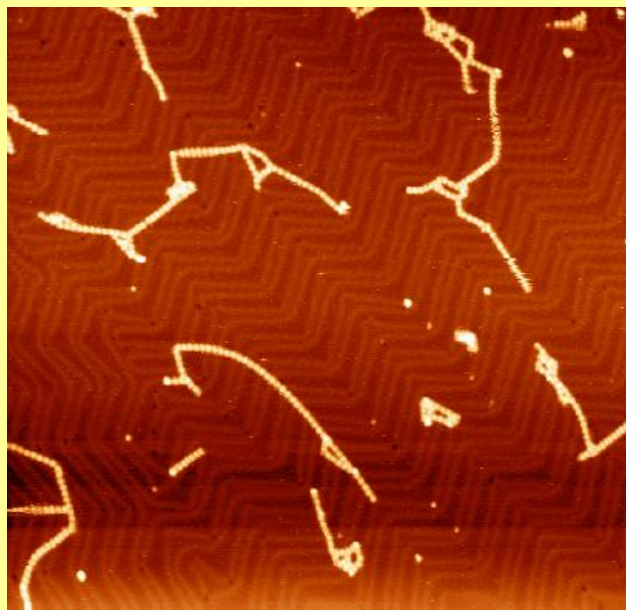
Formation of nanostructures using the gold reconstruction and Fe nucleation as template



0-D nanodots



1-D molecular chains

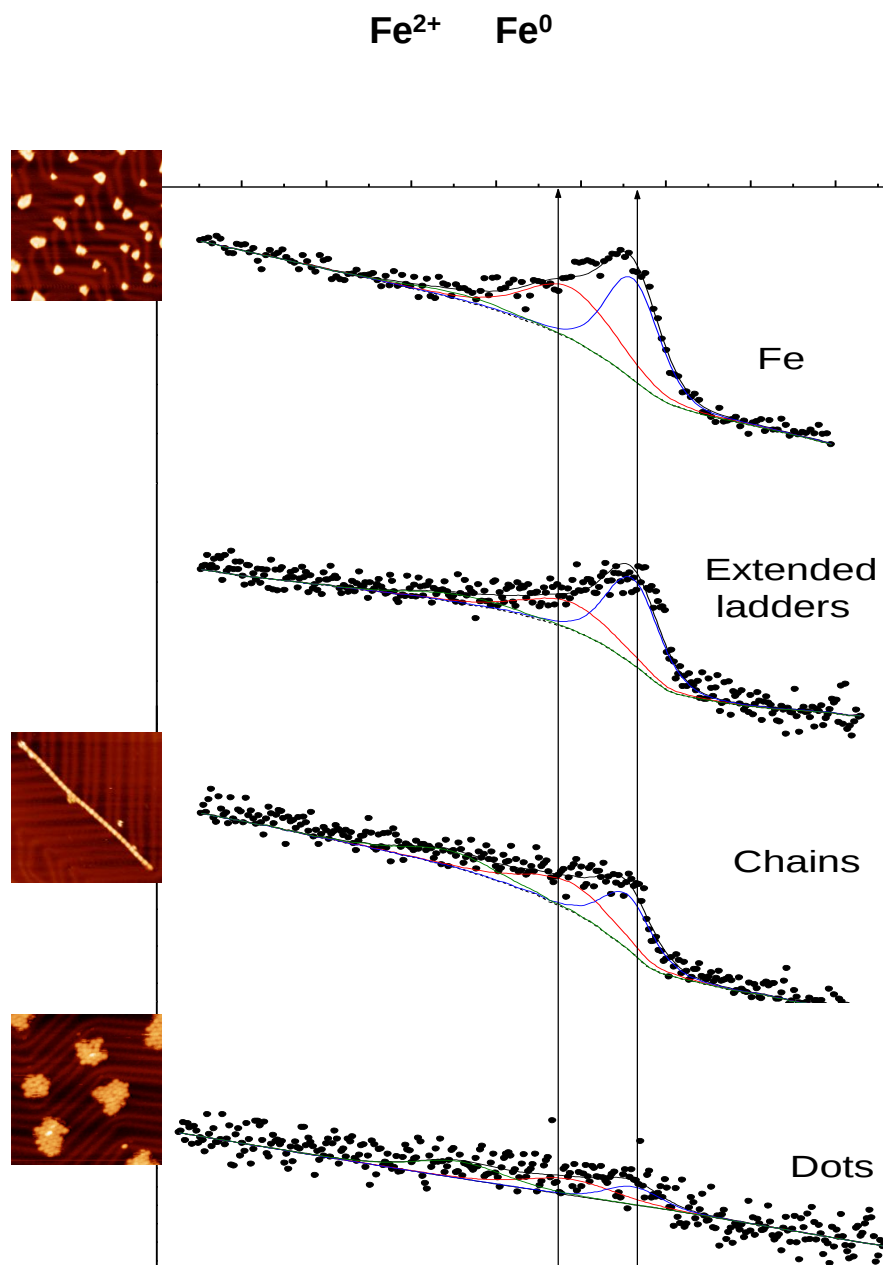


2-D extended structure

4.0nm



XPS STUDY: Fe (2p)



The main contribution for all the samples correspond to metallic Fe^0 : coordination bond

Fe^{2+} : by residual oxygen in the chamber. Typically observed for submonolayer iron deposition on Au(111) in UHV.

XPS STUDY: C(1s)

