Abstract Submitted for the MAR13 Meeting of The American Physical Society

Adsorption and Dynamics behaves of Platinum Atoms on Si(111)-7x7 Surface Studied with Scanning Tunneling Microscopy and First principles Calculation CHE-FU CHOU, HSUN-TA TU, CHOU-MIN YANG, WAN-SHENG SU, MON-SHU HO, None — In this study, behaves of platinum atoms on Si (111) surface were study in use of ultrahigh vacuum scanning tunneling microscope (STM). The surface morphologies of platinum atoms adsorbed on Si (111) surface were observed. Dynamic study showed how the platinum atoms adsorbing and hopping on Si (111) surface. Activation energy was also calculated by fitting the experimental data. A first principle calculation was then performed to establish the adsorption sites, hopping path and the activation energy in the experiment.

> Che-Fu Chou None

Date submitted: 12 Nov 2012

Electronic form version 1.4