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One-dimensional Pt induced chains on Si(337) JESSICA MCCHESNEY, Montana State University, A. BOSTWICK, E. ROTENBERG, Advanced Light Source, GERALD LAPEYRE, Montana State University — The use of high index Si surfaces as templates for the formation of adsorbate induced one-dimensional chain structures have attracted considerable interest. These systems have been used as a test bed in which to study low-dimension physics and components of nanoelectronics. In addition to the Ag and Au induced chains reported to form on the Si(337) surface, Pt also produces one-dimensional chains. Angle-resolved photoemission spectroscopy was used to investigate the electronic structure of these new Pt chains. The valence band mapping confirms the one-dimensional nature of these chains as seen in LEED. Supported by ONR and DOE.

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