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Iridium-silicide nanowires on Si(001) surface¹ DYLAN NICHOLLS,

NURI ONCEL, University of North Dakota — Iridium (Ir) modified Silicon (Si) (001) surface is studied with low energy electron diffraction (LEED) and scanning tunneling microscopy (STM). The surface exhibits $p(2 \times 2)$ domains on LEED intensity images. The STM images show that the basis of the crystal lattice is consists of an Ir atom and a Si dimer and similar to Si(001) dimer rows, they are aligned parallel to the [110] orthogonal directions.

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