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Observation of Standing Waves at Steps on the GaN(0001) Pseudo (1x1) Surface by Scanning Tunneling Spectroscopy at Room Temperature MIKE HARLAND, LIAN LI, University of Wisconsin, Milwaukee — Standing waves formed at steps of the GaN(0001) pseudo (1x1) surface are observed with scanning tunneling spectroscopy (STS) at room temperature. The oscillatory behavior of the dI/dV calculated for free electrons scattered by atomic steps agrees well with that measured by STS, and thus establishes that the surface state of the GaN(0001) pseudo (1x1) has a nearly free-electron like energy dispersion.

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