

Abstract Submitted
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Scanning tunneling spectroscopy of chemical vapor deposition grown graphene DANIEL CORMODE, COLLIN REYNOLDS, BRIAN LEROY, University of Arizona — The electronic properties of CVD grown graphene were investigated by scanning tunneling microscopy. Mono and multi layered samples were prepared by growth on copper and transferred to 300 nm SiO₂ substrates. Raman spectroscopy mapping was used to determine the thickness of the samples as well as characterize regions of higher disorder as evidenced by an increased D peak. The samples were then measured in ultra high vacuum by scanning tunneling spectroscopy at 5 K. The type and density of defects measured with the STM were compared with measured D peak intensity. We have examined the correlation between changes in the local density of states and disorder in monolayer graphene.

Daniel Cormode

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