

Abstract Submitted
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Electronic Confinement in Epitaxial Graphene As Seen by ARPES DAVID SIEGEL, SHUYUN ZHOU, Department of Physics, University of California, Berkeley/Materials Sciences Division, Lawrence Berkeley National Laboratory, ALEXEI FEDOROV, Lawrence Berkeley National Laboratory, ANDREAS SCHMID, FARID EL GABALY, Materials Sciences Division, Lawrence Berkeley National Laboratory, ALESSANDRA LANZARA, Department of Physics, University of California, Berkeley/Materials Sciences Division, Lawrence Berkeley National Laboratory — The epitaxial growth of graphene on 6-H SiC and its electronic structure have been studied with low energy electron microscopy (LEEM) and angle-resolved photoemission spectroscopy (ARPES) respectively. Some of the critical growth parameters that determine sample homogeneity and domain properties have been identified. The resulting electronic structure presents features that generally agree with the conical dispersion of Dirac quasiparticles, however deviations are observed near the Dirac point energy. The dependence of these deviations on real-space electronic confinement is discussed.

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