Fabrication and transport characterization of Graphene/Hexagonal Boron Nitride sandwich structures JIAN-HAO CHEN, KWANPYO KIM, WILL REGAN, WILLIAM GANNETT, KRIS ERICKSON, MICHAEL ROUSSEAS, ALEX ZETTL, Department of Physics, University of California at Berkeley and Materials Sciences Division, Lawrence Berkeley National Laboratory — High quality, large size hexagonal Boron Nitride (h-BN) thin films and single layer graphene were grown on metal substrates via the chemical vapor deposition method (CVD) and transferred to form Graphene/h-BN sandwich structures. High resolution transmission microscopy (TEM) was performed on Graphene and h-BN, confirming highly-ordered crystalline structures of both. The electronic transport properties of various sandwich configurations were investigated at low temperature and high magnetic field.

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