

Abstract Submitted  
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**Electronic Transport Properties of Graphene on Aluminum Nitride**<sup>1</sup> LIANG LI, JUN YAN, Center for Nanophysics and Advanced Materials, University of Maryland, College Park, MD 20742-4111, USA, R.D. VISPUTE, Blue Wave Semiconductors, Inc., MICHAEL FUHRER, Center for Nanophysics and Advanced Materials, University of Maryland, College Park, MD 20742-4111, USA — We have fabricated graphene field-effect transistors on aluminum nitride (AlN) gate dielectric over silicon back gates. AlN thin films are prepared on Si by pulsed laser deposition, and exfoliated graphene on SiO<sub>2</sub> is transferred onto the AlN/Si surface by using thermal tape as a transfer medium. After transfer, Raman spectra and AFM measurement have been performed to confirm the quality of graphene on AlN. Electron transport measurements will be reported.

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