

Abstract Submitted  
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**Thickness Determination of Multilayer Graphene Using Transmission Electron Microscopy**<sup>1</sup> BRIAN SHEVITSKI, MATTHEW MECKLENBURG, UCLA Department of Physics and Astronomy & CNSI, JONATHAN WASSEI, UCLA Department of Chemistry and Biochemistry, RICHARD KANER, UCLA Department of Chemistry and Biochemistry & CNSI, BRUCE WEILLER, The Aerospace Corporation, E.R. WHITE, UCLA Department of Physics and Astronomy & CNSI, BEN DAWSON, MASA ISHIGAMI, UCF, Department of Physics, B.C. REGAN, UCLA Department of Physics and Astronomy & CNSI — With dark field transmission electron microscopy and select area electron diffraction (SAED) crystallographic grain boundaries in graphene can be easily imaged. We present a complete, quantitative theoretical model of the SAED pattern that allows determination of the number of layers. Grain boundary maps of single and multilayer graphene grown by chemical vapor deposition will be shown.

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