

**Abstract Submitted for the 55th Annual Meeting  
Division of Plasma Physics  
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Category Number and Subject:

[ ] Theory [X] Experiment

**Boron Carbide Materials for Inertial Confinement Fusion,\***  
C. Mattsson, *Lehigh University*; G.C. Randall, H. Xu, H. Streckert,  
C. Hill, A. Nikroo, *General Atomics* – Boron carbide shows promise  
as an inertial confinement fusion (ICF) ablator material because it is  
light enough that it can be driven efficiently to high velocity, yet  
strong enough that it may suppress Rayleigh-Taylor instabilities. We  
seek to fabricate strong, homogeneous boron carbide foils with  
thicknesses  $\sim 0.1$  mm, relevant to the production of future ICF  
targets. We analyze the material properties of various chemical vapor  
deposition (CVD), sputtered, and hot-pressed boron carbide samples.

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