

Abstract Submitted
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Alternate Ablator Concepts for High-Foot NIF Ignition Capsules¹ THOMAS DITTRICH, OMAR HURRICANE, SHON PRISBREY, Lawrence Livermore National Laboratory — Encouraging results have been obtained using a strong first shock during the implosion of carbon-based ablator ignition capsules. This strong first shock is launched by an 80 eV to 100 eV “foot” in the x-ray drive pulse in a set of experiments referred to as the “high-foot” series. This higher temperature foot has several advantages to capsule performance, including reduced sensitivity to ablator opacity modeling and significant improvement in capsule implosion stability. Other ablator materials such as Be and B₄C may have advantages over carbon-based materials such as CH (GDP) and HDC (high-density carbon). Performance of these alternate ablator materials will be presented.

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