

Hybrid AL/SiC composite optics for IFE applications.

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The optical components for IFE optics places stringent requirement on the material selection. The surface reflectivity requirement limits the top surface selection to Aluminum. However, thermal stability of Aluminum optics greatly reduces its size. A novel approach to solve this problem is investigated by exploring the hybrid Aluminum / silicon carbine composite structures. The laser threshold damage under short-pulse laser condition of this new class of material will be discussed.