

Abstract Submitted
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Low Pressure Shock Hugoniot of Silica Aerogel RICKY CHAU, LLNL — We present measurements on the low pressure shock Hugoniot of silica aerogel. Previous measurements of the shock Hugoniot of silica aerogel give a Hugoniot that when extrapolated to low pressures give unphysical results. In this study, we used photonic Doppler velocimetry to measure the shock transit time in silica aerogel. The new shock Hugoniot data show a turnover in the shock Hugoniot of silica aerogel at low pressures. The turnover resolves the unphysical behavior in the shock Hugoniot.

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