

Abstract Submitted
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Flash-gap Techniques for Imaging Front Curvature Detonation Records for Non-Ideal High Explosives MARK SHORT, SCOTT JACKSON, Los Alamos National Lab — The light emission of high-temperature shocked inert gases in small gaps (a flash-gap) is a technique that has been utilized for measuring detonation time-of-arrival. In non-ideal granular explosives, air gaps between particles provide natural flash gaps that may be used for imaging of detonation front shape. We will present a series of tests on the use of flash-gap techniques for measuring detonation front shape, with application toward imaging in non-ideal high explosives. These include air and argon gaps, as well as salt and PETN flash-gaps. We will review other flash techniques from the literature and compare our results to them.

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