

Abstract Submitted  
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**Analysis of Ag Single-Wire Explosion Experiments on 1 MA Zebra pulsed power generator at UNR**<sup>1</sup> S.F. KEIM, M.E. WELLER, V.L. KANTSYREV, A.S. SAFRONOVA, A.A. ESAULOV, I. SHRESTHA, G.C. OSBORNE, V.V. SHLYAPTSEVA, University of Nevada, Reno — In order to better understand implosion and radiative characteristics of wire arrays, single wire (SW) loads can be employed due to their uncomplicated configuration. Ag has been a recent focus for wire arrays as the highest atomic number element ( $z = 47$ ) to be investigated for L-shell radiative properties on the Zebra generator and has been shown to produce radiation yields up to 29kJ in planar wire arrays (PWA). The results of two experiments with Ag wire loads, both consisting of a single  $30\mu\text{m}$  wire ( $M \sim 150\mu\text{g}$ ), are analyzed using a full time gated and time integrated diagnostic suite, from 10eV to 50keV. A detailed comparison with results from implosions of Ag PWAs is accomplished. Both generally and specific to SWs, mechanisms of ablation and heating as well as radiative properties during and after the stagnation phase are discussed.

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Steven Keim

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