

Abstract Submitted
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Investigating the double-peaked K-shell pulse emitted by the Xe-doped Ar gas-puff shot Z 2603¹ J.P. APRUZESE, Engility Corporation, Chantilly VA 20151, J.L. GIULIANI, N.D. OUART, Plasma Physics Division, Naval Research Laboratory, V. TANGRI, Berkeley Research Associates, Beltsville MD 20705, A.J. HARVEY-THOMPSON, B. JONES, C.A. JENNINGS, Sandia National Laboratories — A recent series of Ar gas-puff experiments on Sandia National Laboratories' Z generator achieved K-shell yields in excess of 300 kJ. However, when a Xe dopant of 0.8% by number was added to the central jet, the K-shell yield was reduced by a factor of 3, and, only on this shot, it appeared in two distinct, nearly equal peaks. We investigate possible causes of this phenomenon in terms of the evolving properties of the pinch, and the temperature sensitivity of Ar K-shell emissivity.

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