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Effect of micro-structure growth on x-ray production ¹ J.T. MORRISON, E.A. CHOWDHURY, R.L. DASKALOVA, A.G. KRYGIER, A. LINK, V.M. OVCHINNIKOV, C.R. WILLIS, D. CLARK, D.W. SCHUMACHER, L.D. VAN WOERKOM, R.R. FREEMAN, The Ohio State University — High intensity short pulse laser interactions with solid targets have been shown to produce an x-ray burst. The effect of micro-structures on laser coupling efficiency to x-rays was investigated. Metallic targets with and without micro-structure growth were shot at the Scarlet Laser Facility with an intensity near than 3 x 10^{19} W/cm² and energy near 1J. Results will be presented on the enhancement of x-rays.

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