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Attempt to confirm superheavy element production in the ⁴⁸Ca + ²³⁸ U reaction W. LOVELAND, Oregon State University, K.E. GREGORICH, Lawrence Berkeley National Laboratory, D. PETERSON, Argonne National Laboratory, P.M. ZIELINSKI, S.L. NELSON, CH. E. DUELLMANN, C.M. FOLDEN III, D.C. HOFFMAN, G.K. PANG, R. SUDOWE, R.E. WILSON, H. NITSCHE, Lawrence Berkeley National Laboratory, Y.H. CHUNG, Hallym University, K. ALEKLETT, Uppsala University, R. EICHLER, S. SOVERNA, Paul Scherrer Institut, J.P. OMTVEDT, University of Oslo, P. SPRUNGER, Oregon State University, J.M. SCHWANTES, Los Alamos National Laboratory — An attempt to confirm production of superheavy elements in the reaction of ⁴⁸Ca beams with actinide targets has been performed using the ²³⁸U(⁴⁸Ca,3n)²⁸³112 reaction. Two ⁴⁸Ca projectile energies were used, that spanned the energy range where the largest cross sections have been reported for this reaction. No spontaneous fission events were observed. No alpha decay chains consistent with either reported or theoretically predicted element 112 decay properties were observed. The cross section limits reached are significantly smaller than the recently reported cross sections

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