

Abstract Submitted
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Preliminary tests of induced depletion of ^{108m}Ag using bremsstrahlung radiation¹ TREVOR BALINT, GEOFFREY TREES, ISAAC MILLS, MATTHEW RAGAN, NATHAN CALDWELL, THOMAS HARLE, Youngstown State University, ROBERT GURNEY, University of Surrey, MARC LITZ, GEORGE MERKEL, Army Research Laboratory, NINO PEREIRA, Ecopulse, Inc., MIKE HELBA, HILL ROBERTS, ManTech SRS Technologies, Inc., JOE SCHUMER, Naval Research Laboratory, SARKIS KARAMIAN, Joint Institute for Nuclear Research (Dubna), JAMES CARROLL, Youngstown State University — It may be possible to utilize long-lived nuclear isomers to provide energy for certain applications. To do so, a method must be demonstrated to induce the depletion of nuclei within a sample that are metastable in an excited, isomeric state. An experiment is under way at Youngstown State University's X-ray Effects Laboratory as part of the Isomer Physics Project to test the effectiveness of the use of bremsstrahlung radiation as an inducing agent in the depletion of the 418-year ^{108m}Ag isomer. This talk will discuss preliminary results, and experimental designs to increase the detection efficiency.

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