Abstract Submitted
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Investigation of ^{88}Y via (p,dγ) reactions R.O. HUGHES, J.T. BURKE, R.J. CASPERSON, J.E. ESCHER, S. OTA, J.J. RESSLER, N.D. SCIELZO, LLNL, E. MCCLESKEY, M. MCCLESKEY, A. SAASTIMOINEN, TAMU, R.A.E. AUSTIN, St Mary's University, T.J. ROSS, University of Kentucky — The odd-odd nucleus ^{88}Y is of importance in radchem applications due to its proximity to monoisotopic ^{89}Y. It has 49 neutrons and 39 protons, and sits adjacent to the N=50 neutron shell closure and Z=40 proton subshell closure. The structure is complex due to a high density of states, while analysis of the decay scheme is compounded by the presence of several isomers at low energy. As a result, while numerous states have been identified, many inconsistencies remain and most states lack firm spin and parity assignments. In the present work, 28.5 MeV protons from the K150 cyclotron at Texas A&M University were used to bombard ^{89}Y, and the resulting light ions and gamma rays were detected with STARLiTeR. ^{88}Y was populated via the (p,dγ) reaction and substantial statistics were collected. Results from the ongoing analysis will be discussed. This work was performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344

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