Abstract Submitted
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Evolution of Single-Neutron States in Tin Isotopes[1] B. MANNING, J.A. CIZEWSKI, Rutgers University, R.L. KOZUB, Tennessee Tech University, S. AHN, University of Tennessee, J.M. ALLMOND, D.W. BARDAYAN, J.R. BEENE, K.Y. CHAE, ORNL, K.A. CHIPPS, Colorado School of Mines, A. GALINDO-URIBARRI, ORNL, M.E. HOWARD, Rutgers University, K.L. JONES, University of Tennessee, J.F. LIANG, ORNL, M. MATOS, Louisiana State University, C.D. NESARAJA, ORNL, P.D. O'MALLEY, Rutgers University, S.D. PAIN, ORNL, E. PADILLA-RODAL, UNAM, W.A. PETERS, ORAU, S.T. PITTMAN, University of Tennessee, D.C. RADFORD, ORNL, A. RATKIEWICZ, Rutgers University, K.T. SCHMITT, University of Tennessee, D. SHAPIRA, M.S. SMITH, ORNL — The (d,p) reaction was measured with the radioactive ion beams of ^{126,128}Sn in inverse-kinematics at the Holifield Radioactive Ion Beam Facility at ORNL, utilizing the SuperORRUBA silicon detector array. Reaction protons were measured for states above the N=82 shell closure in ^{127,129}Sn. In order to obtain more precise energy levels, particle-gamma coincidence data were acquired for (^{9}Be,^{8}Beγ) in inverse-kinematics at the HRIBF using a HPGe and CsI array (CLARION+BareBall). Cross-sections, angular momentum transfers, and spectroscopic information will be presented. The present work will be combined with previous studies to complete the set of (d,p) studies on even mass tin isotopes from doubly-magic ^{132}Sn to stable ^{124}Sn.

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Brett Manning
Rutgers University

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