

Abstract Submitted
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Magnetic Moments of the 2_1^+ and 4_1^+ States in ^{110}Sn ¹ GERFRIED KUMBARTZKI, Rutgers Univ., N. BENCZER-KOLLER, Rutgers Univ, L. BERNSTEIN, LLNL,UCB Nuclear Engineering, LBNL, D.A. TORRES, Univ. Nacional de Colombia, K.-H. SPEIDEL, Univ. Bonn, J.M. ALLMOND, ORNL, P. FALLON, I. ABRAMOVIC, J.M. BEVINS, A. HURST, LBNL, Z.E. GUEVARA, Univ. Nacional de Colombia, G. GÜRDAL, Millsaps College, L. KIRSCH, UCB Nuclear Engineering, T. LAPLACE, LBNL, A. LO, UCB Nuclear Engineering, H.L. CRAWFORD, E. MATTHEW, I. MEYERS, L. PHAIR, LBNL, F. RAMIREZ, Univ. Nacional de Colombia, Y.Y. SHARON, Rutgers Univ., A. WIENS, LBNL — The structure of the Sn isotopes has been studied via measurements of $B(E2;2_1^+ \rightarrow 0_1^+)$ transition rates and g factors of 2_1^+ states. Values of $B(E2)$'s in the lighter isotopes show an increase in collectivity below midshell, contrary to predictions from shell model calculations. In order to better establish the structure of these neutron-deficient isotopes, measurements of g factors in ^{110}Sn , where the neutrons might occupy both the $g_{7/2}$ and $d_{5/2}$ orbitals, have been carried out. The states of interest were populated in the reaction $^{12}\text{C}(^{106}\text{Cd}, 2\alpha)^{110}\text{Sn}$, at the LBNL 88 inch cyclotron. The γ rays were detected in ORNL and LBNL clover detectors. The transient field technique was used to obtain magnetic moments. The details of the experiment and the results will be presented.

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