

Abstract Submitted
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Parity measurements in ^{80}Sr ¹ R.A. KAYE, C.S. MYERS, Ohio Wesleyan University, J. DÖRING, GSI, S.L. TABOR, T.D. BALDWIN, D.B. CAMPBELL, C. CHANDLER, M.W. COOPER, C.R. HOFFMAN, J. PAVAN, M. WIEDEKING, Florida State University, S.M. GERBICK, Purdue University Calumet, L.A. RILEY, Ursinus College, M.A. HALLSTROM, Case Western Reserve University — High-spin states in ^{80}Sr were studied using the $^{54}\text{Fe}(^{28}\text{Si},2p)$ reaction at 90 MeV and the $^{58}\text{Ni}(^{28}\text{Si},\alpha 2p)$ reaction at 110 MeV using the Tandem-Superconducting LINAC accelerator at Florida State University (FSU). Prompt $\gamma - \gamma$ coincidences were measured in the first reaction using the FSU array of ten Compton-suppressed Ge detectors. γ -ray linear polarizations were measured in both reactions using three Clover detectors as Compton polarimeters. As a result of these measurements, the parities of three non-yrast band structures have been determined, confirming the interpretations of the most recent in-beam and β -decay studies. In particular, the most strongly populated non-yrast band has been assigned negative parity, in agreement with most other neighboring even-even nuclei. Another high-spin sequence, with a parity assignment left open by the most recent in-beam study, has been tentatively assigned negative parity.

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