

Abstract Submitted
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New high-spin level scheme of ^{112}Rh : signature inversion and possible chirality SHAOHUA LIU, UNIRIB/Oak Ridge Associated Universities, J.H. HAMILTON, A.V. RAMAYYA, Vanderbilt University, S.J. ZHU, Tsinghua University, Y. SHI, F.R. XU, Peking University, J.C. BATCHELDER, UNIRIB/Oak Ridge Associated Universities, N.T. BREWER, J.K. HWANG, Y.X. LUO, Vanderbilt University, J.O. RASMUSSEN, Lawrence Berkeley National Laboratory, W.C. MA, Mississippi State University — Neutron-rich Rh ($Z = 45$) isotopes are located in the $A \approx 110$ region where the nuclear structures are characterized by shape coexistence and shape transitions. The appearance of triaxial deformations have been found for nuclei $Z \geq 41$ in this mass region. ^{112}Rh has been re-investigated by examining the prompt γ -rays emitted in the spontaneous fission of ^{252}Cf with the Gammasphere detector array. A new side band was built in ^{112}Rh which can be called a yrare band that has been found in ^{104}Rh , ^{106}Rh , and ^{114}Rh . The phenomena of signature inversion in the yrast band of 112 and possible chirality were discussed.

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