Abstract Submitted
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Shape coexistence and the role of axial asymmetry in ^{72,76}Ge[1] A. D. AYANGEAKAA, R. V. F. JANSSENS, Argonne Natl Lab, C. Y. WU, LLNL, J. M. ALLMOND, ORNL, J. L. WOOD, Georgia Tech, S. ZHU, M. ALBERS, S. ALMARAZ-CALDERON, ANL, B. BUCHER, LLNL, M. P. CARPENTER, C. J. CHIARA, ANL, D. CLINE, U. Rochester, H. L. CRAWFORD, LBNL, H. M. DAVID, ANL, J. HARKER, U. Maryland, A. B. HAYES, U. Rochester, C. R. HOFFMAN, B. P. KAY, ANL, K. KOLOS, U. Tennessee, A. KORICHI, CSNSM Orsay, T. LAURITSEN, ANl, A. O. MACCHIAVELLI, LBNL, A. RICHARDS, Ohio U., D. SEWERYNIAK, ANL, A. WIENS, LBNL — The structure of low-lying states in medium-mass germanium isotopes ^{72}Ge and ^{76}Ge is investigated via projectile Coulomb excitation with GRETINA and CHICO2. In both nuclei, complete sets of $E2$ matrix elements were determined and substantial evidence for triaxiality and shape coexistence, based on the model-independent shape invariants deduced from the Kumar-Cline sum rule, has been observed [3]. These observations are supported by results of a two-state mixing model as well as multi-configuration mixing calculations carried out within the framework of the triaxial rotor model. These observations and the role of axial asymmetry in the shape coexistence phenomena, as well as results pertaining to rigid triaxiality in ^{76}Ge will be presented.

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