Abstract Submitted
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New Levels of ^{157}Pm[1] J. RANGER[2], Vanderbilt University, Furman University, E.H. WANG, J.H. HAMILTON, A.V. RAMAYYA, J.K. HWANG, Vanderbilt University, A. NAVIN, M. REJMUND, A. LEMASSON, S. BHATTACHARYYA, GANIL, Y.X. LUO, J.O. RASMUSSEN, LBNL, S.J. ZHU, Tsinhua University, G.M. TER-AKOPIAN, YU. OGANESSIAN, JINR, VANDERBILT UNIVERSITY TEAM, GANIL TEAM, TSINGHUA UNIVERSITY TEAM, JINR TEAM, LBNL TEAM — Gamma rays in coincidence with isotopically-identified fission fragments using VAMOS++ and EXOGAM, produced using ^{238}U on a ^{9}Be target, at an energy around the Coulomb barrier have been reported. In the present work, we have combined data from the in-beam mass- and Z-gated spectra with the γ-γ-γ-γ data from ^{252}Cf (SF) to assign transitions and levels in ^{157}Pm. In contrast to Hwang, 2009, the transitions previously assigned to ^{156}Pm are all seen in the M-Z gated spectra of ^{157}Pm and are not seen in the M-Z gated spectra of ^{156}Pm. The new expanded levels of ^{157}Pm are remarkably similar to those of the levels in ^{155}Pm, which have been assigned as a rotational band built on π 5/2 [532].

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