

SEARCH FOR LINKING TRANSITIONS IN ^{143}Eu ¹

F. Lerma², D. R. LaFosse², M. Devlin², D. G. Sarantites², S. Asztalos³, R. M. Clark³,
P. Fallon³, I. Y. Lee³, A. O. Macchiavelli³, R. W. MacLeod³, C. Baktash, M. J. Brinkman,
and D. Rudolph

An experiment was performed with the Gammasphere Ge-detector array, and the Microball charged particle detector, to search for transitions involved in the decay from the yrast superdeformed band in ^{143}Eu . Sum spectra in coincidence with single, double, and triple gates on SD transitions were produced to search for previously reported two-step links between the superdeformed and the near-yrast ND levels. The sum spectra contained no evidence of peaks corresponding to sums of two-step linking transitions. Several discrete γ rays were observed in coincidence with the yrast SD band. One previously reported single-step transition at 3361 keV was confirmed to decay out of the SD band.

¹Abstract of published paper: Phys Rev C **56**, R1671 (1997).

²Washington University, St. Louis, MO 63130.

³Lawrence Berkeley National Laboratory, Berkeley, CA 94720.