

Abstract Submitted
for the SES13 Meeting of
The American Physical Society

Relative Yields of ^{152}Pr in Spontaneous Fission of ^{252}Cf J.M. ELDRIDGE, Union University, Vanderbilt University, E. WANG, J.K. HWANG, J.H. HAMILTON, A.V. RAMAYYA, Y.X. LUO, Vanderbilt University, J.O. RASMUSSEN, LNBL, S.J. ZHU, Tsinghua University, S.H. LIU, ORAU, G.M. TERAKOPIAN, YU. TS. OGANESSIAN, JINR — The relative yields of ^{152}Pr , resulting from the spontaneous fission of ^{252}Cf , were studied. This study was done by means of $\gamma - \gamma - \gamma$, and $\gamma - \gamma - \gamma - \gamma$ coincidence data taken in 2000 by the multi-HPGe, Compton-suppressed, gamma detector array, Gammasphere, at Lawrence Berkeley National Lab. The coincidence data were analyzed by double- and triple-gating on transitions in ^{152}Pr and obtaining the intensities of the $^{94-99}\text{Y}$ (6n-1n channels respectively) transitions. These results were used to verify the new assignments by Wang *et al.* for the level scheme of ^{152}Pr [1] by showing that both new bands peak at the same, 3n, Channel. This is consistent with neighboring isotopes of Pr.

[1] E. Wang et al., BAPS, SESAPS, 11/13.

Jonathan Eldridge
Union University, Vanderbilt University

Date submitted: 01 Aug 2013

Electronic form version 1.4