# $^{243}$Fm

Münzenberg et al. reported the discovery of $^{243}$Fm in 1981 in "The new isotopes $^{247}$Md, $^{243}$Fm,$^{239}$Cf, and investigation of the evaporation residues from fusion of $^{206}$Pb, $^{208}$Pb, and $^{209}$Bi with $^{40}$Ar" (1981Mu12). A $^{206}$Pb target was bombarded with a 4.8 MeV/u $^{40}$Ar beam from the GSI UNILAC accelerator to form $^{243}$Fm in the (3n) fusion-evaporation reaction. Recoil products were separated with the velocity filter SHIP and implanted in an array of position sensitive surface-barrier detector which also recorded subsequent $\alpha$ decay and spontaneous fission. "Correlated to this decay we observed a daughter decay of (7,630±25)keV and a half1ife of $(39^{+37}_{-12})$s. We assign these two decays to $^{243}$Fm and its daughter $^{239}$Cf."

Adapted from reference (2013Th02)


1981Mu12 G. Munzenberg, S. Hofmann, W. Faust, F. P. Hessberger *et al.*, Z. Phys. A **302**, 7 (1981).

2013Th02 M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).



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