^{158}Pm

In 1987, Greenwood et al. identified ^{158}Pm in the paper entitled "Identification of new neutron-rich rare-earth isotopes produced in ^{252}Cf Fission" (1987Gr12). Spontaneous fission fragments from a ^{252}Cf source were measured with the isotope separation on line (ISOL) system at the Idaho National Engineering Laboratory. ^{158}Pm was identified by mass separation and the measurement of K x-rays. "^{158}Pm. Identification of the ^{158}Pm decay was accomplished in two separate experiments, with collection country cycle times of 12 and 16 s, respectively. One γ ray, at 72.7 keV, together with the Sm K x rays could be associated with this activity. The half-life values determined for the x rays and 72.7-keV γ rays were in reasonable agreement, being (4.5$\pm$0.5) s and (5.5$\pm$0.8) s, respectively."

Adapted from reference (2012Ma48)

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