^{238}Cm

In the 1994 paper "Electron-capture delayed fission properties of the new isotope ^{238}Bk" Kreek et al. reported the observation of ^{238}Cm (1994Kr03). ^{241}Am targets were bombarded with 75 MeV α particles from the Berkeley 88-inch cyclotron forming ^{238}Bk in the (7n) fusion-evaporation reaction. ^{238}Cm was then populated in β decay. In addition, α-particle spectra were measured following chemical separation. "The alpha-decay chains for ^{238}Bk and ^{238}Cm are shown in [the figure]. The ^{238}Cm decay was consistent with a 2.4-h half-life." In 1956, Glass et al. reported excitation functions for the reactions ^{239}Pu(α,5n) and Pu^{238}(α,4n) without measuring any properties of ^{238}Cm (1956Gl80).

Adapted from reference (2013Fr02)

1956Gl80 R. A. Glass, R. J. Carr, J. W. Cobble, and G. T. Seaborg, Phys. Rev. **104**, 434 (1956).

1994Kr03 S. A. Kreek, H. L. Hall, K. E. Gregorich, R. A. Henderson *et al.*, Phys. Rev. C **49**, 1859 (1994).

2013Fr02 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 96 (2013).

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