

²⁴⁰Bk

In the 1980 article “Study of delayed fission of the isotopes of Bk, Es, and Md” Gangrskii et al. identified ²⁴⁰Bk (1980Ga07). A ²³²Th target was bombarded with a ¹⁴N beam from one of the Dubna cyclotrons forming ²⁴⁰Bk in the (6n) fusion-evaporation reaction. ²⁴⁰Bk was identified by electron-capture delayed fission where the fission fragments were measured with solid-state track detectors consisting of lavesan polyester films. “The observed fission activities have half-lives close to those expected in fission after electron capture of ²⁴⁶Es (8 min) and ²⁴⁰Bk (the half-life 5 ± 2 min obtained in the present work for this case is consistent with the value $T_{1/2} = 4$ min which follows from the systematics for ²⁴⁰Bk).”

Adapted from reference (2013Fr02)

1980Ga07 Yu. P. Gangrsky, M. B. Miller, L. V. Mikhailov, and I. F. Kharisov, Sov. J. Nucl. Phys. **31**, 162 (1980).

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

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