^{241}Bk

Asai et al. reported the discovery of ^{241}Bk in the 2003 paper "Identification of the new isotope ^{241}Bk" (2003As01). ^{239}Pu targets were bombarded with 34-42 MeV ^{6}Li beams from the JAERI tandem accelerator producing ^{241}Bk in the (4n) fusion-evaporation reaction. ^{241}Bk was separated with the gas-jet coupled JAERI-ISOL on-line separator. X- and γ-rays were measured with a coaxial Ge detector and a 35% n-type Ge detector. "The half-lives of Cm $K_{\alpha 1}$ and $K_{\alpha 2}$ X-rays were deduced through both the analyses. By taking a weighted average, the half-life of ^{241}Bk was determined to be 4.6±0.4 min."

Adapted from reference (2013Fr02)

2003As01 M. Asai, K. Tsukada, S. Ichikawa, M. Sakama *et al.*, Eur. Phys. J. A **16**, 17 (2003).

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

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