^{224}At

In the 2010 paper "Discovery and investigation of heavy neutron-rich isotopes with time-resolved Schottky spectrometry in the element range from thallium to actinium", Chen et al. described the discovery of ^{224}At (2010Ch19). A beryllium target was bombarded with a 670 MeV/u ^{238}U beam from the GSI heavy-ion synchrotron SIS and projectile fragments were separated with the fragment separator FRS. The mass and half-life of ^{224}At was measured with time-resolved Schottky Mass Spectrometry in the storage-cooler ring ESR. "In [the figure] time traces and their projection into a frequency spectrum are shown for the new isotope ^{224}At and close-lying ions." They half-life was 76^{+138}_{-23} s.

Adapted from reference (2013Fr09)

2010Ch19 L. Chen, W. R. Plass, H. Geissel, R. Knobel *et al.*, Phys. Lett. B **691**, 234 (2010).

2013Fr09 C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 497 (2013).

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