

¹¹¹Sb

In the 1972 paper “Decay of the light antimony isotopes ^{110,111,112,113,114}Sb following the ^{112,114}Sn(p,xn) reactions,” Singh et al. reported the discovery of ¹¹¹Sb ([1972Si28](#)). Enriched ¹¹²Sn targets were bombarded with 30 MeV protons from the UCLA cyclotron forming ¹¹¹Sb in the (p,2n) reaction. Beta-ray spectra were measured with a single wedge-gap magnetic spectrometer and a stack of four Si(Li) detectors and γ -rays were recorded with two Ge(Li) and one NaI(Tl) detector. “The γ -spectrum of ¹¹¹Sb, recorded for 120 sec following the irradiation of ¹¹²Sn with 30 MeV protons is shown in [the figure]. The transitions belonging to ¹¹¹Sb are clearly separated from ^{112,114}Sb and other weaker contaminants.” The reported half-life was 74.1(14) s.

Adapted from reference ([2013Ka01](#))

[1972Si28](#) M. Singh, J. W. Sunier, R. M. Devries, and G. E. Thompson, Nucl. Phys. A **193**, 449 (1972).

[2013Ka01](#) J. Kathawa, C. Fry, and M. Thoennessen, At. Data Nucl. Data Tables **99**, 22 (2013).

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