^{242}Am

^{242}Am was identified by Manning and Asprey in 1949 in "Preparation and radioactive properties of Am^{242}" (1949MaZZ). ^{241}Am was irradiated with neutrons in the thimble of the Argonne heavy-water pile. Alpha-particle spectra were measured following chemical separation. "$_{95}$Am^{241} captures neutrons to yield Am^{242}, a β emitter with a half life of 16$\pm$3 hr. The maximum β energy for Am^{242} is approximately 1.0$\pm$0.3 mev." Seaborg et al. had produced ^{242}Am earlier but did not measure any properties (1949Se02). Seaborg et al. acknowledged the first half-life measurements of ^{242}Am by Manning and Asprey.

Adapted from reference (2013Fr02)

1949MaZZ W. M. Manning and L. B. Asprey, The Transuranium Elements: Research Papers, Book 2, Vol. 14B, paper 22. 7, G. T. Seaborg ed. , p. 1595 (1949).

1949Se02 G. T. Seaborg, R. A. James, and L. O. Morgan, The Transuranium Elements: Research Papers, Book 2, Vol. 14B, paper 22. 1, G. T. Seaborg ed. , p. 1525 (1949).

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

Please cite this abstract as: "FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152"