

## **<sup>242</sup>Pu**

<sup>242</sup>Pu was discovered by Thompson et al. from Berkeley as described in the 1950 paper “The new isotope Pu<sup>242</sup> and additional information on other plutonium isotopes” (1950Th54). <sup>242</sup>Pu was produced by irradiating <sup>239</sup>Pu and <sup>241</sup>Am samples with neutrons. Following chemical separation, <sup>242</sup>Pu was identified by mass spectroscopy. “Alpha-pulse analysis of this plutonium showed the presence of alpha-particles of 4.88 Mev in abundance corresponding to a half-life of roughly  $5 \times 10^5$  years for Pu<sup>242</sup>.”

Adapted from reference (2013Fr02)

1950Th54 S. G. Thompson, K. Street Jr., A. Ghiorso, and F. L. Reynolds, Phys. Rev. **80**, 1108 (1950).

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

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