

## **<sup>147</sup>Pr**

<sup>147</sup>Pr was discovered by Hoffman and Daniels in 1964: “Some short-lived isotopes of cerium and praseodymium” (1964Ho03). Uranyl nitrate was irradiated by the Los Alamos Water Boiler Reactor and <sup>147</sup>Pr was identified by  $\beta$ -counting and by measuring  $\gamma$ - and  $\beta$ -ray spectra following chemical separation. “The following new  $\beta$ -decay chains of cerium and praseodymium were identified in the fission products of <sup>235</sup>U: <sup>147</sup>Ce(65±6 sec)-<sup>147</sup>Pr(12.0±0.5 min) and <sup>148</sup>Ce(43±10 sec)-<sup>148</sup>Pr(1.98±0.10 min)... The mass assignments of 5.98 hr <sup>145</sup>Pr and the 12 min <sup>147</sup>Pr were substantiated by ( $\gamma$ ,p) reactions on enriched <sup>146</sup>Nd and <sup>148</sup>Nd.”

Adapted from reference (2012Ma48)

1964Ho03 D. C. Hoffman and W. R. Daniels, J. Inorg. Nucl. Chem. **26**, 1769 (1964).

2012Ma48 E. May and M. Thoennessen, At. Data Nucl. Data Tables **98**, 960 (2012).

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