^{149}Pr

^{149}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 ^{149}Pr was produced by irradiating enriched ^{150}Nd with 22-24 MeV betatron bremsstrahlung. "The following new β-decay chains of cerium and praseodymium were identified in the fission products of ^{235}U: ^{147}Ce(65$\pm$6 sec)-^{147}Pr(12.0$\pm$0.5 min) and ^{148}Ce(43$\pm$10 sec)-^{148}Pr(1.98$\pm$0.10 min)... The mass assignments of 5.98 hr ^{145}Pr and the 12 min ^{147}Pr were substantiated by (γ,p) reactions on enriched ^{146}Nd and ^{148}Nd. Similar irradiations of ^{150}Nd produced some evidence for an $\sim$2.3 min activity attributable to ^{149}Pr."

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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