

## <sup>148</sup>Eu

Hoff et al. from the University of California at Berkeley reported the observation of <sup>148</sup>Eu in the 1951 paper “Neutron deficient europium and gadolinium isotopes” in 1951 ([1951Ho30](#)). Enriched <sup>148</sup>Sm targets were bombarded with 8.5 MeV protons producing <sup>148</sup>Eu in (p,n) charge exchange reactions. Decay curves and absorption spectra were measured. “The decay of europium isotopes with mass numbers 147 and 148 was observed after proton bombardments of enriched samarium isotopes. The (p,n) reaction is probably virtually the only nuclear reaction induced by 8.5-MeV protons on samarium.”. The observed half-lives was 50(2) days.

Adapted from reference ([2013Ma01](#))

[1951Ho30](#) R. W. Hoff, J. O. Rasmussen, and S. G. Thompson, Phys. Rev. **83**, 1068 (1951).

[2013Ma01](#) E. May and M. Thoennessen, At. Data Nucl. Data Tables **99**, 1 (2013).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”