

^{145}Er

“Identification of ^{145}Er and ^{145}Ho ” was published in 1989 by Vierinen et al. describing the observation of ^{145}Er ([1989Vi02](#)). Enriched ^{92}Mo targets were bombarded with a 283-MeV ^{58}Ni beam from the Berkeley SuperHILAC and ^{145}Er was formed in the (2p3n) fusion-evaporation reaction. Recoil products were separated with the On-line Aparatur for SuperHILAC Isotope Separation OASIS and ^{145}Er was identified by measuring γ -ray and delayed proton spectra. “With the ^{145}Dy half-life fixed at 8 s and assuming a negligible contribution from the potential ^{145}Ho protons, a two-component analysis of the decay curves associated with the delayed protons in the 1.6- and 4-s tape cycles yielded a half-life of 0.9 ± 0.3 s for ^{145}Er .” This half-life corresponds to an isomeric state. The ground state was first populated 14 years later by Ginter et al. (2003).

Adapted from reference ([2013Fr10](#))

- [1989Vi02](#) K. S. Vierinen, J. M. Nitschke, P. A. Wilmarth, R. M. Chasteler *et al.*, Phys. Rev. C **39**, 1972 (1989).
[2013Fr10](#) C. Fry and M. Thoennessen, At. Data Nucl. Data Tables **99**, 520 (2013).

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