

## $^{174}\text{Ta}$

Faler and Rasmussen described the observation of  $^{174}\text{Ta}$  in “New neutron-deficient isotopes of tantalum” in 1960 ([1960Fa03](#)).  $^{14}\text{N}$  beams between 35 and 95 MeV from the Berkeley heavy-ion linear accelerator bombarded  $\text{Ho}_2\text{O}_3$  powder targets and (xn) fusion evaporation reactions produced tungsten which subsequently decayed to tantalum isotopes. Decay curves and  $\gamma$ -ray spectra were measured with an end-window G-M counter and a Na(Tl) detector following chemical separation. “Bombardment of  $\text{Ho}_2\text{O}_4$  with  $\text{N}^{14}$  ions in the Berkeley heavy-ion linear accelerator has resulted in the discovery of new isotopes of tantalum which have been assigned as  $\text{Ta}^{173}$  and  $\text{Ta}^{174}$ . They have half-lives of 3.7 hr and 1.3 hr, respectively.”

Adapted from reference ([2012Ro36](#))

- [1960Fa03](#) K. T. Faler and J. O. Rasmussen, Phys. Rev. **118**, 265 (1960).  
[2012Ro36](#) R. Robinson and M. Thoennessen, At. Data Nucl. Data Tables **98**, 911 (2012).

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