

¹⁵¹Dy

Toth and Rasmussen reported the discovery of ¹⁵¹Dy in the 1958 paper “Studies of rare earth alpha emitters” (1958To27). Praseodymium was bombarded with a beam of ¹⁴N from the Berkeley 60-in. cyclotron. Decay curves of the subsequent activities were measured. “The 19-min and 7-min dysprosium alpha emitters, mentioned at the beginning of this paper, have not been given definite mass assignments. However, because of the evidence for the existence of a new isotope, Dy¹⁴⁹, and because the 2.5-hr dysprosium alpha emitter has been shown to be Dy¹⁵², it would be logical to assume that the 7-min and 19-min nuclides are Dy¹⁵⁰ and Dy¹⁵¹. Also, if alpha-energy systematics hold in the rare earth region, then the 7-min isotope with an alpha energy of 4.2 Mev must be Dy¹⁵⁰, and the 19-min isotope with a 4.06-Mev alpha energy must be Dy¹⁵¹.” Previously, Rasmussen et al. had assigned the half-life of 2.3(2) h to a dysprosium isotope with 149 ≤ A ≤ 153 (1953Ra02).

The assignment was changed from the original compilation (2013Fr10) which credited a later paper by Toth and Rasmussen (1959To27) with the discovery of ¹⁵¹Dy.

- 1953Ra02 J. O. Rasmussen Jr., S. G. Thompson, and A. Ghiorso, Phys. Rev. **89**, 33 (1953).
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