^{148}Gd

Rasmussen et al. from the University of California at Berkeley observed ^{148}Gd in 1953 as described in the paper "Alpha-radioactivity in the 82-neutron region" (1953Ra02). Natural samarium and enriched ^{147}Sm was bombarded with 38 MeV α-particles and europium oxide was bombarded with 50 MeV protons. Resulting α-activities were measured with an ionization chamber following chemical separation. "The mass assignment to 148 rather than to 147 seems more consistent with the long half-life (>35 years) of this activity, for the even-odd nucleide Gd^{147} should have considerable energy available for electron capture decay and consequently a much shorter half-life than 35 years."

Adapted from reference (2013Ma01)

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

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