

¹³⁶Pr

The assignment of ¹³⁶Pr was reported in 1968 in “A new neodymium isotope (A = 136) and its decay properties” by Zhelev et al. from Dubna ([1968Zh04](#)). A 660 MeV proton beam bombarded a gadolinium target and ¹³⁶Pr was identified with γ - and β -ray spectra following chemical separation. “Here we show that the β^+ and γ radiations observed in the 55-min neodymium activity are not due to decay of ¹³⁷Nd but to decay of a new isotope, ¹³⁶Nd, and its daughter ¹³⁶Pr.” The quote half-life for ¹³⁶Pr was 13.5 min. Previously reported half-lives of 70 min ([1954Ha68](#)) and 1.00(15) h ([1958Da13](#)) was incorrect.

Adapted from reference ([2012Ma48](#))

- [1954Ha68](#) T. H. Handley and E. L. Olson, Phys. Rev. **96**, 1003 (1954).
[1958Da13](#) G. T. Danby, J. S. Foster, and A. L. Thompson, Can. J. Phys. **36**, 1487 (1958).
[1968Zh04](#) Z. Zhelev, V. G. Kalinnikov, J. Liptak, and L. K. Peker, Bull. Acad. Sci. USSR, Phys. Ser. **32**, 1497 (1969).
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