# $^{153}$Nd

In 1987, Greenwood et al. identified $^{153}$Nd in the paper entitled "Identification of New Neutron-Rich Rare-Earth Isotopes Produced in $^{252}$Cf Fission" (1987Gr12). Spontaneous fission fragments from a $^{252}$Cf source were measured with the isotope separation on line (ISOL) system at the Idaho National Engineering Laboratory. $^{153}$Nd was identified by mass separation and the measurement of K x-rays. "Identification of the $^{153}$Nd isotope was first reported by Pinston et al. In the present work, however, a total of 48 $\gamma$-ray transitions could be associated with this decay, compared with the eight transitions reported earlier. The half-life value was obtained from an average of individual values involving the Pm K x rays and the 32.2-, 105.5-, 345.0-, 418.3-, and 976.1-keV $\gamma$ rays." The quoted Pinston reference was only published in a conference proceedings nine years earlier (1978PiZQ).

Adapted from reference (2012Gr02)


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