

¹⁶⁵Lu

The first identification of ¹⁶⁵Lu was reported in “Gamma rays from 11.8 min ¹⁶⁵Lu, a new isotope” by Meijer et al. in 1973 ([1973Me25](#)). Thulium foils were bombarded with 50, 60, 70 and 80 MeV ³He beams from the Amsterdam synchrocyclotron. A Ge(Li) anti-compton spectrometer and a Ge(Li) surface barrier detector were used to measure the γ -ray spectra. “In experiments with 70 or 80 MeV bombarding energy we observed several strong lines decaying with 11.9 ± 0.5 min. The highest production of this activity was at 80 MeV irradiation energy, corresponding to the maximum of the (³He,7n) reaction. Further evidence for the assignment to ¹⁶⁵Lu is provided by the fact that we observed the strongest lines in the ¹⁶⁵Yb daughter decay growing in with about 9 minutes and decaying with 11.8 minutes.”

Adapted from reference ([2012Gr19](#))

[1973Me25](#) B. J. Meijer, F. W. N. de Boer, and P. F. A. Goudsmit, *Radiochim. Acta* **19**, 150 (1973).

[2012Gr19](#) J. L. Gross and M. Thoennessen, *At. Data Nucl. Data Tables* **98**, 983 (2012).

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