

^{165}Eu

Hayashi et al. observed ^{165}Eu as reported in the 2007 paper “ Q_β measurements of $^{158,159}\text{Pm}$, $^{159,161}\text{Sm}$, $^{160-165}\text{Eu}$, ^{163}Gd , and ^{166}Tb using a total absorption BGO detector” (2007Ha57). A uranium carbide target was bombarded by 32 MeV protons from the Tokai tandem accelerator. ^{163}Eu , ^{164}Eu , and ^{165}Eu were formed in the reaction $^{238}\text{U}(p,f)$ and identified with the Tokai-ISOL on-line mass separator. Beta-decay energies were measured with two BGO scintillation detectors. “Isotopes of $^{163,164,165}\text{Eu}$ were recently identified by our group using this ion source, and the Q_β values of $^{160-165}\text{Eu}$ and ^{163}Gd were measured for the first time.” The earlier publication mentioned in the quote referred to a presentation by Sato at the 61st Annual Meeting of the Physical Society of Japan in 2006.

Adapted from reference (2013Ma01)

2007Ha57 H. Hayashi, Y. Akita, O. Suematsu, M. Shibata *et al.*, *Eur. Phys. J. A* **34**, 363 (2007).

2013Ma01 E. May and M. Thoennessen, *At. Data Nucl. Data Tables* **99**, 1 (2013).

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