

¹¹⁰Ag

Bothe and Gentner first identified ¹¹⁰Ag at the Institut für Physik am Kaiser Wilhelm-Institut für medizinische Forschung in Heidelberg, in their 1937 paper “Herstellung neuer Isotope durch Kernphotoeffekt” (1937Bo12). They made the assignment based on the non-observation of ¹¹⁰Ag in photonuclear reactions on ¹⁰⁷Ag and ¹⁰⁹Ag: “Silber zeigte eine neue Halbwertszeit von 24 min. Von den beiden bekannten, durch Neutronenanlagerung entstehenden Halbwertszeiten wurde außerdem die von 2.3 min erhalten, nicht aber die von 22 sec. Hiernach ist folgende Zuordnung anzunehmen: Ag¹⁰⁶ = 24 min; Ag¹⁰⁸ = 2.3 min; Ag¹¹⁰ = 22 sec.” [Silver showed a new half-life of 24 min. In addition, of the two known half-lives produced by neutron addition, the 2.3 min half-life was observed, however, not the 22 sec half-life. Therefore, the following assignment can be assumed: Ag¹⁰⁶ = 24 min; Ag¹⁰⁸ = 2.3 min; Ag¹¹⁰ = 22 sec.]. The first measurement of 20 s (1934Fe01) and 22 s (1935Am01) half-lives for silver were made by neutron irradiations, however, no mass assignments were made.

Adapted from reference (2010Sc10)

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