

¹⁰⁸Ag

Bothe and Gentner first identified ¹⁰⁸Ag at the Institut für Physik am Kaiser Wilhelm-Institut für medizinische Forschung in Heidelberg, in their 1937 paper “Herstellung neuer Isotope durch Kernphotoeffekt” (1937Bo12). ¹⁰⁸Ag was produced in the reaction ¹⁰⁹Ag(γ ,n): “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.). Half-lives of 2 m (1934Fe01) and 2.3 m (1935Am01) had been previously reported for silver, however, no mass assignment was made. The assignment was also confirmed two more times in the same year (1937Po05, 1937Kr01).

Adapted from reference (2010Sc10)

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