^{174}W

^{174}W was first reported by Stephens et al. in 1965 in "Rotational states produced in heavy-ion nuclear reactions" (1965St03). ^{174}W was produced with a 83 MeV ^{11}B beam from the Lawrence Radiation Laboratory Hilac at Berkeley bombarding a thulium target in the fusion-evaporation reaction ^{169}Tm(^{11}B,6n)^{174}W. A single wedge-gap electron spectrometer was used to detect conversion electrons. In addition, γ-ray spectra were recorded with NaI(Tl) and germanium detectors. Seven γ-ray transitions up to spin 14 in ^{174}W were observed: "Mass assignments were made on the basis of the change in bombarding energy necessary to go from the maximum of the excitation function of one even nucleus to that of the next lighter one-about 30 MeV per pair of neutrons out. The close similarity in bombarding energy to produce a given reaction in any of these three targets coupled with the results of a number of cases where a given product could be made via more than one reaction leaves no doubt as to the mass assignments." The half-life of ^{174}W was first reported one month prior to the submission of the first Stephens paper in an internal report by Santoni and Valentin (1964Sa22) and independently a year later in a refereed publication by Demeter et al. (1965De25).

The assignment was changed from the original compilation (2010Fr08) which credited an earlier publication by Stephens et al. (1964St12) with the discovery of ^{174}W. However, in that paper only rotational constants as a function of spin were presented.

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