^{186}Ir

In the 1958 paper "Neutron-deficient iridium isotopes", Diamond and Hollander reported the discovery of ^{186}Ir (1958Di44). Natural rhenium targets were bombarded with α particles between 25 and 45 MeV from the Berkeley Crocker 60-inch cyclotron. Following chemical separation, decay curves were measured with proportional counter and γ-rays spectra were recorded with a sodium iodide crystal. "In this work we have established the transitions that belong to mass 186 by an observation of the particular electron lines and photons that disappear from the complex spectrum when the alpha particle bombarding energy is lowered from 33-34 MeV (threshold for production of Ir^{185}) to 25−27 MeV (threshold for production of Ir^{186}); such transitions are assigned to Ir^{186}." Smith and Hollander questioned the previous assignment of an 11.8 h half-life to ^{187}Ir by Chu (1950Ch11) arguing that it corresponded most likely to ^{186}Ir.

Adapted from reference (2012Ro36)

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