^{185}Ir

In the 1958 paper "Neutron-deficient iridium isotopes", Diamond and Hollander reported the discovery of ^{185}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. "With alpha particles of 45 MeV initial energy Ir^{185} is produced from rhenium by the reaction $Re^{185}(\alpha,4n)Ir^{185}$; there are simultaneously produced the heavier isotopes of iridium from lower order reactions, The Ir^{185} radiations can be distinguished, and the mass assignment made, by repeating the bombardment with alpha particles of initial energy lower than the threshold for the (α,4n) reaction, i.e., 33−34 MeV, and observing which conversion lines and photons are eliminated at the lower energy irradiations."

Adapted from reference (2012Ro36)

1958Di44 R. M. Diamond and J. M. Hollander, Nucl. Phys. **8**, 143 (1958).

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