

⁶⁰Cu

Leith et al. reported the first observation of ⁶⁰Cu in the 1947 paper “Radioactivity of Cu⁶⁰” (1947Le07). Protons from 5 to 15 MeV from the Berkeley 37-in. frequency-modulated cyclotron bombarded separated ⁵⁸Ni and ⁶⁰Ni targets. Activities were measured with an ionization chamber and Ryerson-Lindemann electrometer. The assignment of ⁶⁰Cu was firm: “Chemical separation of normal nickel targets after bombardment with 15-Mev and 6-Mev protons into Cu, Ni, and Co fractions, accomplished within one hour, showed in each case that more than 99 percent of the 24.6-minute activity followed the Cu-separation chemistry. Mass separation in a calutron accomplished within one hour of the proton bombardment, showed without question that this activity belonged to Cu⁶⁰.” The previous tentative assignment of 7.9 min to ⁶⁰Cu (1938Ri01, 1939De01) was incorrect.

Adapted from reference (2012Ga06)

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