^{73}Cu

Runte et al. reported the discovery of ^{73}Cu in 1983: "Decay Studies of Neutron-Rich Products from ^{76}Ge Induced Multinucleon Transfer Reactions Including the New Isotopes ^{62}Mn, ^{63}Fe, and ^{71,72,73}Cu" (1983Ru06). A 9 MeV/u ^{76}Ge beam from the GSI UNILAC accelerator was used to bombard a natural tungsten target and the copper isotopes were produced in deep inelastic reactions. The reaction products were collected in a graphite catcher inside a FEBIAD-E ion source and separated with an on-line mass separator. "In addition to the known nuclides of the elements chromium through germanium with A=56-75, we identified the decays of ^{62}Mn, ^{63}Fe, and ^{71,72,73}Cu, of which only ^{63}Fe was known from direct particle-identification measurements to be bound." The following half-lives were obtained for $^{71-73}$Cu, respectively: 19.5(16), 6.6(1) and 3.9(3) s.

Adapted from reference (2012Ga06)

1983Ru06 E. Runte, W. D. Schmidt-Ott, P. Tidemand-Petersson, R. Kirchner *et al.*, Nucl. Phys. A **399**, 163 (1983).

2012Ga06 K. Garofali, R. Robinson, and M. Thoennessen, At. Data Nucl. Data Tables **98**, 356 (2012).

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