^{22}C

The discovery of ^{22}C was reported in 1986 by Pougheon et al. in "First Observation of the Exotic Nucleus ^{22}C" (1986Po13). A 44 MeV/u ^{40}Ar beam was fragmented on a tantalum target at GANIL. The fragments were measured with the triple-focusing magnetic spectrometer LISE and identified by measuring energy-loss, energy and time-of-flight. "The nuclei with a ratio of A/Z = 3 (i.e. ^{15}B, ^{18}C, ^{21}N) are clearly visible forming a line of constant time of flight. This, together with the observed absence in the plot of isotopes known to be particle unstable (^{16}B) ensures an unambiguous identification of the observed isotopes. In this plot the ^{19}B and the ^{22}C isotopes are observed without any surrounding background event."

Adapted from reference (2012Th01)

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