^{46}Cr

Zioni et al. published the first observation of ^{46}Cr in the paper "An Investigation of Proton-Rich Nuclei and Other Products from the Bombardment of ^{24}Mg, ^{28}Si and ^{32}S by ^{16}O Ions" in 1972 (1972Zi02). At the Jerusalem Racah Institute a ^{16}O beam was accelerated to 22−33 MeV with an EN tandem and ^{46}Cr was produced in the fusion-evaporation ^{32}S(^{16}O,2n) reaction on a zinc sulphide target. Beta- and γ-ray spectra were recorded with a NE102 plastic scintillator and a Ge(Li) detector, respectively. "In particular the mass excess of the previously unobserved nucleus ^{46}Cr is found to be −29.46±0.03 MeV; its half-life is 0.26±0.6 s." A previously reported half-life of 1.1 s (1954Ty33) was incorrect.

Adapted from reference (2012Ga06)

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