^{8}C

^{8}C was discovered by Robertson et al. in the 1974 paper "Highly Proton-Rich T_z = −2 Nuclides: ^{8}C and ^{20}Mg" (1974Ro17). Alpha-particles accelerated to 156 MeV by the Jülich isochronous cyclotron bombarded a natural carbon target and produced ^{8}C in the reaction ^{12}C(α,^{8}He). The ^{8}He ejectiles were measured in a double-focusing magnetic analyzer and the energy-loss, energy, magnetic rigidity and time-of-flight were recorded. "The measured mass excess of ^{8}C is 35.30±0.20 MeV, and ^{8}C is thus unbound."

Adapted from reference (2012Th01)

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