43 Cr ε decay (21.2 ms) 2001Gi01

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Parent: 43 Cr: E=0.0; J^{π} =(3/2⁺); $T_{1/2}$ =21.2 ms 7; $Q(\varepsilon)$ =15620 SY; % ε +% β ⁺ decay=100.0

2001Gi01: E=74.5 MeV/nucleon 43 Cr beam was produced in projectile fragmentation experiment using Ni(58 Ni,X) at the GANIL facility. Target of a 230.6 mg/cm² thick natural nickel and 2.7 mg/cm² thick carbon stripper. Isotopes were selected with the Alpha spectrometer and the LISE3 separator. The selected isotopes were implanted in a silicon telescope of two silicon detectors. Measured $T_{1/2}(^{43}$ Cr) and delayed-proton spectra.

⁴³V Levels

E(level) J^{π} Comments

8.25×10³ 23 (3/2⁺) Main β⁺ decay may be to IAS state of ⁴³Cr g.s. at 8255 230 (2001Gi01).

ε, β^+ radiations

 $\frac{\text{E(decay)}}{(7370 \text{ SY})} \frac{\text{E(level)}}{8250}$

 $^{^{43}\}text{Cr-J}^{\pi}$, $T_{1/2}$: From Adopted Levels of ^{43}Cr .

⁴³Cr-Q(ε): 15620 400 (syst,2012Wa38).

⁴³Cr decays also by β^+ p to ⁴²Ti and by β^+ 2p to ⁴¹Sc; by β^+ 3p to ⁴⁰Ca (2011Po01,2012Au08).