^{43}Cr β^+3p decay (21.2 ms) 2012Au08

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Jun Chen	NDS 140, 1 (2017)	30-Sep-2015

Parent: ^{43}Cr: E=0; J^π=(3/2$^+$); $T_{1/2}$=21.2 ms *7*; Q(β^+3p)=10679 *SY*; %β^+3p decay=0.18 *13*

^{43}Cr-Q(β^+3p): 10679 *400* (syst), deduced by compiler from mass excesses of ^{43}Cr, ^{40}Ca and proton in 2012Wa38.

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

^{43}Cr-%β^+3p decay: From %β^+3p=0.13 *+18−8* deduced by 2012Au08 from relative β^+3p branching of 0.14% *+19−9* (2012Au08) and total proton branching of 91.0% *23*, weighted average of 92.5% *28* (2007Do17) and 88% *4* (2011Po01).

2012Au08: ^{43}Cr nuclei were produced in the reaction Ni(^{58}Ni,X) at the LISE3 separator at GANIL. ^{43}Cr ions were separated, identified and then implanted onto the time projection chamber (TPC). Charged particles were detected in a two-dimensional strip detector combined with drift-time analysis to reconstruct the tracks of the particles in three dimensions. Characterization of the TCP was done with the β^+p decay of ^{52}Ni with reference to proton energies and branching ratios. Measured energy loss, decay event counts, angular correlation between two protons. Deduced branching ratio. Recorded events in this study: 180 events for ^{43}Cr β^+2p emission, and three events for β^+3p emission.

^{40}Ca Levels

E(level)	J^π
0	0$^+$