Adopted Levels

History

Type Author Citation Literature Cutoff Date
Full Evaluation E. Browne, J. K. Tuli NDS 113,715 (2012) 31-May-2011

 $Q(\beta^{-})=1.03\times10^{4} \text{ syst}; S(n)=2.0\times10^{3} \text{ syst}$ 2012Wa38

Note: Current evaluation has used the following Q record \$10370 calc 2110 calc 15320 calc -3890 calc 1997Mo25. S(2n)=6420, S(2p)=28200 (1997Mo25, calculated).

2010Oh02: ¹⁴³Te nuclide identified in Be(²³⁸U,F) and Pb(²³⁸U,F) reactions with a ²³⁸U⁸⁶⁺ beam energy of 345 MeV/nucleon produced by the cascade operation of the RBIF accelerator complex of the linear accelerator RILAC and four cyclotrons RRC, fRC, IRC and SRC. Identification of ¹⁴³Te nuclei was made on the basis of magnetic rigidity, time-of-flight and energy loss of the fragments using BigRIPS fragment separator. Experiments performed at RIKEN facility.

Additional information 1.

¹⁴³Te Levels

 $\frac{\text{E(level)}}{0} \quad \frac{\text{T}_{1/2}}{>408 \text{ ns}}$

Comments

%β⁻=?; %β⁻n=?; %β⁻2n=? Measured σ=300 pb (2010Oh02), systematic uncertainty≈30%.

T_{1/2}: lower limit from time-of-flight in 2010Oh02. Actual half-life is expected to be much longer as suggested by the calculated values of 75 ms (1997Mo25); 67 ms (2002Pf04).

 J^{π} : $3/2^{+}$ predicted in calculations of 1997Mo25.

Additional information 2.

Calculated $\%\beta^-$ n=15.91, $\%\beta^-$ 2n=1.59 (1997Mo25). Calculated $\%\beta^-$ n=16.3 (2002Pf04).