Adopted Levels

History

Type Author Citation Literature Cutoff Date
Full Evaluation M. S. Basunia and A. M. Hurst NDS 134, 1 (2016) 1-Feb-2016

 $S(p)=-50 SY; Q(\alpha)=-8690 SY 2012Wa38$ $S(p)=50 (syst) 720 (syst), Q(\alpha)=-8690 (syst) 780 (syst) (2012Wa38).$

2011Fo08: $^9\text{Be}(^{32}\text{S},\text{X}\gamma)$ – ^{32}S beam, E=50.3 MeV/nucleon, from bombarded a ^9Be target (thickness 92.4 mg/cm²). Fragments were separated by ACCULINNA separator at JINR, Dubna facility. Time-of-flight- ΔE and ΔE -E techniques using plastic scintillators and Si strip detectors were used to identify fragments. The separator was tuned to optimum transmission of ^{26}S , ^{27}S , ^{28}S and ^{29}S . Total time of flight through the separator was 314-322 ns.

From systematics of fragmentation cross sections, 16 + 6 - 4 events expected for 26 S, but no events could be ascribed to this nuclide.

²⁶S Levels

 $\frac{\text{E(level)}}{0.02} \quad \frac{\text{J}^{\pi}}{0^{+}} \quad \frac{\text{T}_{1/2}}{670 \text{ ms}}$

Comments

 $T_{1/2}$: Estimated from flight time of 314-322 ns, Poisson statistics of the observed distribution (2011Fo08) of one to four events. At 98% confidence level, $T_{1/2}$ <157 ns.

Based on experimental half-life limit, 2011Fo08 deduce Q(2p)>640 keV in absence of one-proton decay branch, and >230 keV if one-proton decay branch is allowed (2011Fo08).