⁸⁴Mo ε decay 2009St04

History

Type Author Citation Literature Cutoff Date
Full Evaluation D. Abriola and M. Galan NDS 110,2815 (2009) 30-Sep-2009

Parent: 84 Mo: E=0; J^{π} =0+; $T_{1/2}$ =2.3 s 3; $Q(\varepsilon)$ =6720 SY; $\%\varepsilon+\%\beta^+$ decay=100.0

⁸⁴Mo-Q(ε): 6720 500 (syst,2009AuZZ). Other: 6070 500 (syst,2003Au03).

2009St04: ⁸⁴Mo produced in fragmentation reactions ⁹Be(¹²⁴Xe,X) E=140 MeV/A; separation by A1900 Fragment separator and further purified by new Radio Frequency Fragment Separator, fragment implanted into a double-sided silicon strip detector, TOF of fragment measured and event by event correlation with subsequent β decays. Prompt and delayed γ rays measured with 16 Ge detectors (segmented germanium array). The $\beta\gamma$ coincidence spectrum does not show any γ ray of ⁸⁴Nb daughter.

⁸⁴Nb Levels

 $\frac{\text{E(level)}}{0.0} \quad \frac{\text{J}^{\pi^{\dagger}}}{(1^{+},2^{+},3^{+})} \quad \frac{\text{T}_{1/2}^{\dagger}}{9.8 \text{ s } 9} \quad \frac{\text{Comments}}{\text{J}^{\pi},\text{T}_{1/2}: \text{ from Adopted Levels.}}$

[†] From Adopted Levels.