160 Hf lpha decay

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Full Evaluation C. W. Reich NDS 113, 2537 (2012) 1-Mar-2012

Parent: 160 Hf: E=0.0; J^{π} =0+; $T_{1/2}$ =13.6 s 2; $Q(\alpha)$ =4902.1 26; $\%\alpha$ decay=0.7 2

 $^{160}\mathrm{Hf}\text{-T}_{1/2}$: Additional information 1.

 160 Hf-Q(α): Additional information 2.

 160 Hf-%α decay: From %α=0.7 2 (1995Hi12). Other: 0.023 6, estimated from parent-daughter activities (1973To02).

Additional information 3.

Unless noted otherwise, the α -related data are from the evaluation of 1998Ak04.

¹⁵⁶Yb Levels

 $\frac{\text{E(level)}}{0.0} \quad \frac{\text{J}^{\pi}}{0^{+}}$

 α radiations

 $\frac{\text{E}\alpha}{4780 \ 3} \quad \frac{\text{E(level)}}{0.0} \quad \frac{\text{I}\alpha^{\dagger}}{100}$

Comments

Eα: From the evaluation of 1991Ry01. This value is also the one obtained from an average of 4779 6 (1992Ha10), 4780 10 (1995Hi12), 4778 6 (1996Pa01), together with the data included in the evaluation of 1991Ry01.

 $I\alpha$: α intensity per 100 α decays.

I α : Only one α group was observed. An upper limit of 0.09% of total α decay is calculated for an unobserved 4257-keV α to the 2⁺ state at 536.4 keV in ¹⁵⁶Yb by requiring HF(4257 α)>1. HF: $r_0(^{156}\text{Yb})$ =1.548 20 is calculated from HF(4780 α)=1.0.

[†] For absolute intensity per 100 decays, multiply by 0.007 2.