218 Th α decay

History

Type Author Citation Literature Cutoff Date
Full Evaluation Shaofei Zhu and E. A. Mccutchan NDS 175,1 (2021)

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Parent: 218 Th: E=0.0; J^{π} =0+; $T_{1/2}$ =122 ns 5; $Q(\alpha)$ =9849 9; $\%\alpha$ decay=100

²¹⁴Ra Levels

 $\frac{\text{E(level)}}{0.0} \quad \frac{\text{J}^{\pi}}{0^{+}} \quad \frac{\text{T}_{1/2}}{\text{2.444 s } 20} \quad \frac{\text{Comments}}{\text{T}_{1/2} : \text{From the Adopted Levels.}}$

α radiations

 Eα
 E(level)
 $Iα^{\ddagger}$ HF^{\dagger} Comments

 9668 10
 0.0
 100
 1.000
 Eα: weighted average of 9665 10 (1973No09) and 9680 20 (1973Ha32). Other: 9700 80 (1970Va13) and 9.72 MeV 7 (2018Br13).

 $I\alpha$: only one α group has been observed.

²¹⁸Th-Q(α): from 2021Wa16.

 $^{^{218}}$ Th- $T_{1/2}$: from Adopted Levels of 218 Th (2019Si39).

 $^{^{\}dagger}$ r₀(²¹⁴Ra)=1.549 3 is calculated from HF(9668 α)=1.0.

[‡] Absolute intensity per 100 decays.