

$^{114}\text{Cs}$   $\alpha$  decay (0.57 s) 1980Ro04,1981Sc17

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal and F. G. Kondev		NDS 113, 1315 (2012)	1-Aug-2011

Parent:  $^{114}\text{Cs}$ :  $E=0.0$ ;  $J^\pi=(1^+)$ ;  $T_{1/2}=0.57$  s 2;  $Q(\alpha)=3351$  22;  $\% \alpha$  decay=0.018 6

$^{114}\text{Cs}$ - $Q(\text{g.s.})$  calculated by the evaluators using  $E\alpha=3233$  keV 21.

**1980Ro04**: The measurements were performed at the GSI mass separator. The beam was accelerated to 261-290 MeV at the heavy-ion accelerator UNILAC. Parent  $^{114}\text{Cs}$  was produced using  $^{58}\text{Ni}(^{58}\text{Ni},\text{pn})$ . Two telescope arrays were used to measure  $\alpha$  particles. Measured:  $E\alpha$ ,  $T_{1/2}$ ,  $\% \alpha$ .

**1981Sc17**: The measurements were performed at the GSI mass separator. The beam was produced at the heavy-ion accelerator UNILAC. Parent  $^{114}\text{Cs}$  was produced using  $^{58}\text{Ni}(^{58}\text{Ni},\text{pn})$  reaction.  $\alpha$  particles were detected using surface-barrier detector telescopes. Measured:  $E\alpha$ .

Others: 1985Ti02, 1982Ti05, 1982Pi05, 1981Pi05, 1979Sc22, 1978Ro19, 1978Da07.

 $^{110}\text{I}$  Levels

$E(\text{level})^\dagger$	$J^\pi^\dagger$	$T_{1/2}^\dagger$
0.0	(1 <sup>+</sup> )	0.664 s 24

<sup>†</sup> From Adopted Levels.

 $\alpha$  radiations

$E\alpha$	$E(\text{level})$	$I\alpha^\ddagger$	$\text{HF}^\dagger$	Comments
3233 21	0.0	100	3.1 13	$E\alpha$ : Weighted average of 3239 30 (1981Sc17) and 3226 30 (1980Ro04).

<sup>†</sup>  $r_0(^{110}\text{I})=1.64$  6, value taken for  $^{108}\text{Te}$ . It should be noted that  $r_0$  values are not known in neighboring  $^{112}\text{Xe}$ ,  $^{114}\text{Xe}$ ,  $^{114}\text{Ba}$  and  $^{116}\text{Ba}$  isotopes, thus the HF value should be considered as tentative.

<sup>‡</sup> For absolute intensity per 100 decays, multiply by 0.00018 6.