

^{257}Rf α decay (4.1 s) 1997He29,2010St14

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 114, 1041 (2013)	1-Mar-2012

Parent: ^{257}Rf : $E \approx 75$; $J^\pi = (11/2^-)$; $T_{1/2} = 4.1$ s 4; $Q(\alpha) = 9083$ 8; $\% \alpha$ decay = 88 2

^{257}Rf -E(level), $T_{1/2}$, $Q(\alpha)$ are from ^{257}Rf Adopted Levels.

2010St14: ^{253}Rf produced in ^{261}Sg decay. ^{261}Sg produced in $^{208}\text{Pb}(^{54}\text{Cr},n)$. Measured α , γ , $\alpha\gamma$. γ 's measured by four-fold segmented clover detector. α energy resolution (FWHM) ≈ 21 keV. γ energy resolution (FWHM) 1.3 4 4 keV.

2002HeZS: Present α spectrum. Authors state that their preliminary results confirm those of 1997He29.

 ^{253}No Levels

E(level)	J^π
0.0 [†]	(9/2 ⁻)
54 [†] 14	(11/2 ⁻)

[†] Band(A): Band 9/2⁻ [734]. $A \approx 6$ keV (if $\beta = 0$), $E_0 \approx -95$ keV.

 α radiations

Both α 's are seen in delayed coincidence with daughter (^{253}No) α 's.

E_α	E(level)	I_α [†] #	HF [‡]
8968 10	54	44 3	20 3
9021 10	0.0	56 3	22 3

[†] Per 100 α decays.

[‡] $r_0(^{253}\text{No}) = 1.470$.

For absolute intensity per 100 decays, multiply by 0.88 2.

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