

$^{261}\text{Rf } \alpha$  decay (70 s)    2008Du09

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

Parent:  $^{261}\text{Rf}$ : E=0.0;  $T_{1/2}=70$  s 3;  $Q(\alpha)=8648$  36; % $\alpha$  decay=90 10

$^{261}\text{Rf-Q}(\alpha)$ : From 2011AuZZ.

$^{261}\text{Rf-T}_{1/2}$ : Weighted average of 68 s 3 (2008Du09), 65 s 10 (1999Ar21,1970Gh01), 78 s +11–6 (1996Ka66,2000Ho27,2002Ho11), and 75 s 7 (1996Ka66,2000Sy01). Others: 65 s (1994Lo27,1994La22), 20 s +110–10 (2008Dv02), 71 s +342–33 (2008Ga08).

$^{261}\text{Rf-}\% \alpha$  decay: From %SF≤11 (2008Du09,2002Ho11,2000Ho27,1996Ka66). Other: % $\epsilon+\beta^+<15$  (1999Ar21,1970Gh01).

**Additional information 1.**

1970Gh01:  $^{248}\text{Cm}(^{18}\text{O},5\text{n})^{261}\text{Rf}$ ; parent of  $^{257}\text{No}$ .

 $^{257}\text{No}$  Levels

E(level)	Comments			
0.0+x	E(level): x=239 36 from $Q(\alpha)=8648$ 36 (systematics,2011AuZZ) and $E\alpha$ ; based on the assumption that the 70 s activity is the g.s. of $^{261}\text{Rf}$ .			
<u><math>\alpha</math> radiations</u>				
$E\alpha$	E(level)	$I\alpha^\ddagger$	$HF^\ddagger$	Comments
8280 20	0.0+x	≈100	≈1.3	$E\alpha, I\alpha$ : from 1970Gh01, 2002Ho11.

<sup>†</sup>  $r_0(^{257}\text{No})=1.475$  20.

<sup>‡</sup> For absolute intensity per 100 decays, multiply by 0.90 10.