

$^{263}\text{Sg}$   $\alpha$  decay    1974Gh04

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 114, 1041 (2013)	1-Aug-2011

Parent:  $^{263}\text{Sg}$ : E=0.0;  $T_{1/2}=1.0$  s 2;  $Q(\alpha)=9403$  SY; % $\alpha$  decay≈30.0

**Additional information 1.**

1974Gh04:  $^{249}\text{Cf}(^{18}\text{O},4\text{n})$ , established  $^{263}\text{Db} \alpha$   $^{259}\text{Rf} \alpha$   $^{255}\text{No}$  decay sequence (1974Gh04).

Others: 1997Ho03 (from  $^{208}\text{Pb}(^{62}\text{Ni},\text{n})^{271}\text{Hs}$ ); 1995Og02 (from  $^{238}\text{U}(^{34}\text{S},5\text{n})^{267}\text{Hs}$ ).

 $^{259}\text{Rf}$  Levels

E(level)	Comments		
0.0+x 203+x 40	E(level): X=10 from $Q(\alpha)=9403$ (systematics, 2012Wa38) and $E\alpha$ . $\Delta E$ given does not include the estimated $\Delta E$ in X.		

 $\alpha$  radiations

$E\alpha^{\ddagger}$	E(level)	$I\alpha^{\ddagger\#}$	$HF^{\ddagger}$
9060 40	203+x	≈90	≈2
9250 40	0.0+x	≈10	≈75

<sup>†</sup>  $r_0(^{259}\text{Rf})=1.465$  20.

<sup>‡</sup> From 1974Gh04.

# For absolute intensity per 100 decays, multiply by ≈0.3.