

$^{260}\text{Lr}$   $\alpha$  decay (180 s) [1971Es01](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 141, 327 (2017)	22-Mar-2017

Parent:  $^{260}\text{Lr}$ :  $E=0.0$ ;  $T_{1/2}=180$  s 30;  $Q(\alpha)=8400$  SY; % $\alpha$  decay=80 20

$^{260}\text{Lr}$ - $T_{1/2}$ : From  $^{260}\text{Lr}$  Adopted Levels in the ENSDF database.

$^{260}\text{Lr}$ - $Q(\alpha)$ : 8400 140 (syst,[2017Wa10](#)).

$^{260}\text{Lr}$ -% $\alpha$  decay: The  $\alpha$  branching of  $^{260}\text{Lr}$  is adopted as 80% 20 from the  $\varepsilon$  decay branching estimated by [1971Es01](#) as % $\varepsilon<40$ .

[1971Es01](#): measured  $E\alpha$ ,  $I\alpha$ , half-life of  $^{260}\text{Lr}$  decay.

 $^{256}\text{Md}$  Levels

E(level)	J $^{\pi}$	Comments
0.0	(1 $^{-}$ )	
$\approx 240$		E(level): deduced from $Q(\alpha)(^{260}\text{Lr})$ and measured $E\alpha$ in $^{260}\text{Lr}$ $\alpha$ decay.

 $\alpha$  radiations

$E\alpha$	E(level)	$I\alpha^{\ddagger}$	HF $^{\dagger}$	Comments
8035 20	$\approx 240$	100	1.8	$E\alpha$ : measured by <a href="#">1971Es01</a> . The original energy is increased by 5 keV because of changes in calibration energies: $^{213}\text{Fr}$ and $^{211}\text{Po}$ $\alpha$ rays, $E\alpha(^{213}\text{Fr})=6773$ , $E\alpha(^{211}\text{Po})=7443$ , were used as internal calibration. $E\alpha(^{213}\text{Fr})=6775.0$ 17, $E\alpha(^{211}\text{Po})=7450.3$ 5 are recommended by <a href="#">1991Ry01</a> . $I\alpha$ : only one $\alpha$ group was identified by <a href="#">1971Es01</a> : $I\alpha$ is per 100 $\alpha$ decays.

$^{\dagger}$   $r_0(^{256}\text{Md})=1.487$  10, extrapolated from the  $r_0$  values given in [1998Ak04](#), is used in calculation.

$^{\ddagger}$  For absolute intensity per 100 decays, multiply by 0.80 20.