

^{246}Es α decay

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	M. J. Martin, C. D. Nesaraja		NDS 186, 261 (2022)	31-Dec-2021

Parent: ^{246}Es : $E=0.0$; $T_{1/2}=7.5$ min 5; $Q(\alpha)=7640$ SY; $\% \alpha$ decay=9.9 18

^{246}Es - $Q(\alpha)$: $\Delta Q(\alpha)=100$ (syst, 2021Wa16).

$T_{1/2}(^{246}\text{Es})=7.5$ min 5, $\% \alpha=9.9$ 18, adopted in 2011Br11;

 ^{242}Bk Levels

E(level)	$T_{1/2}$	Comments
(0.0) ≈ 150	7.0 min 13	E(level): calculated from $Q(\alpha)=7640$ and $E\alpha=7370$ 4.

 α radiations

$E\alpha$	E(level)	$I\alpha^{\ddagger}$	HF †	Comments
7370 4	≈ 150	100	3.8 21	$E\alpha$: measurement of 1989Ha27. Other measurements: 7350 (1954Gh12), 7330 30 (1967Mi06), 7360 30 (1973Es01). $I\alpha$: only one α group from ^{246}Es decay has been identified.

† The nuclear radius parameter $r_0(^{242}\text{Bk})=1.498$ 26 is deduced from unweighted average of radius parameters of the adjacent nuclides ^{241}Cm and ^{243}Cf . See 2020Si16 to determine radius parameter for both these nuclides from adjacent nuclides.

‡ For absolute intensity per 100 decays, multiply by 0.099 18.