

^{113}Xe α decay [1978Ro19](#),[1979Sc22](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. Kumar(a), J. Chen(b) and F. G. Kondev		NDS 137, 1 (2016)	31-May-2016

Parent: ^{113}Xe : $E=0.0$; $J^\pi=(5/2^+)$; $T_{1/2}=2.74$ s 8; $Q(\alpha)=3087$ 8; $\% \alpha$ decay=0.010 10

^{113}Xe - $\% \alpha$ decay: From estimated upper limit of $\% \alpha < 0.020$ in [1985Ti05](#). A value of $\% \alpha=0.035$ was estimated by [1978Ro19](#). [1979Sc22](#): activity using $E(^{58}\text{Ni})=290$ MeV beam on a ^{58}Ni (4 mg/cm²) target, UNILAC GSI; Tantalum catcher, GSI mass separator; Detector: Windmill system, ΔE -E telescopes. Measured: $E\alpha$.

Others: [1978Ro19](#), [1973Ha37](#), [1979Ew02](#).

 ^{109}Te Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	(5/2 ⁺)	4.4 s 2	$J^\pi, T_{1/2}$: From Adopted Levels.

 α radiations

$E\alpha$	E(level)	$I\alpha^\ddagger$	HF [†]	Comments
2978 8	0.0	100	≤ 2.7	$E\alpha$: From $Q\alpha$. Measured $E\alpha=2985$ keV 15 (1979Sc22) and 2990 keV 30 (1978Ro19).

[†] $r_0(^{109}\text{Te})=1.64$ 6, taken from $r_0(^{108}\text{Te})$, deduced by assuming HF=1.0.

[‡] For absolute intensity per 100 decays, multiply by 0.00010 10.