

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	A. A. Sonzogni	NDS 93,599 (2001)	1-Dec-2000

$Q(\beta^-)=6.40\times 10^3$ 3; $S(n)=4741$ 7; $S(p)=1.35\times 10^4$ syst; $Q(\alpha)=-2.94\times 10^3$ 3 [2012Wa38](#)

Note: Current evaluation has used the following Q record 5778 syst 4960 syst 12729 syst -2863 syst [1995Au04](#).

$\Delta Q(\beta^-)=318$ keV.

$\Delta S(n)=388$ keV.

$\Delta S(p)=511$ keV.

$\Delta Q(\alpha)=594$ keV.

Identification through genetic means; observed ^{144}Ce activity in the decay of $^{235}\text{U}(n,F)$ E=th ([1976Ah01](#)).

Measured isotope shift: [1989Bo03](#).

Theory: [1995Ba45](#), [1994Ma02](#), [1992Na07](#), [1988So08](#).

 ^{144}Xe LevelsCross Reference (XREF) Flags

A ^{248}Cm SF decay

E(level)	J^π	$T_{1/2}$	XREF	Comments
0.0 [†]	0 ⁺	1.15 s 20	A	$\% \beta^- = 100$ $T_{1/2}$: from 1976Ah01 . Others: ≈ 1 s (1950Di02), 8.8 s 22 (?) (1966La16) $\delta < r^2 \geq 0.91$ fm ² 8, relative to ^{136}Xe .
252.6 [†]	(2 ⁺)		A	
644.3 [†]	(4 ⁺)		A	
1132.2 [†]	(6 ⁺)		A	
1688.0 [†]	(8 ⁺)		A	
2302.7 [†]	(10 ⁺)		A	

[†] Band(A): g.s. band.

[‡] From g.s. band systematics.

 $\gamma(^{144}\text{Xe})$

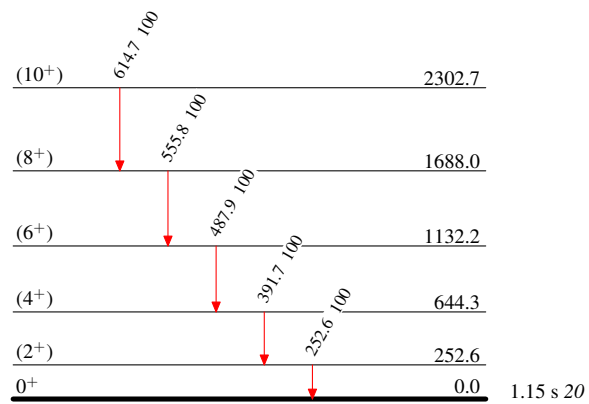
$E_i(\text{level})$	J_i^π	E_γ	I_γ	E_f	J_f^π
252.6	(2 ⁺)	252.6	100	0.0	0 ⁺
644.3	(4 ⁺)	391.7	100	252.6	(2 ⁺)
1132.2	(6 ⁺)	487.9	100	644.3	(4 ⁺)
1688.0	(8 ⁺)	555.8	100	1132.2	(6 ⁺)
2302.7	(10 ⁺)	614.7	100	1688.0	(8 ⁺)

Adopted Levels, GammasLevel Scheme

Intensities: Type not specified

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$

 $^{144}_{54}\text{Xe}_{90}$

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