

^{121}Ba ε decay [1974Ka31](#),[1985IcZZ](#),[1988Se08](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	S. Ohya	NDS 111, 1619 (2010)	20-Jan-2009

Parent: ^{121}Ba : $E=0.0$; $J^\pi=5/2^{(+)}$; $T_{1/2}=29.7$ s 15; $Q(\varepsilon)=6.36\times 10^3$ 14; $\% \varepsilon + \% \beta^+$ decay=100.0

[1974Ka31](#): $\text{Zr}(^{32}\text{S},\text{xn})$, $E=180$ MeV; on-line ms delayed-proton emission following $\varepsilon+\beta^+$ decay of ^{121}Ba was measured. $I(\text{delayed p})/I(\beta^+)=0.37/1.8\times 10^3$. No γ -ray measurement was made.

[1985IcZZ](#),[1988Se08](#): $^{\text{nat}}\text{Mo}(^{32}\text{S},\text{X})$, $E=165$ MeV; on-line mass separation; proposed a decay scheme, but the order of the 98.2- and 110.6-keV gammas, also the order of the 99.2- and 111.6-keV gammas are not certain.

[1996Os04](#): measured $Q_{+-}=6.34$ MeV 16 with pure Ge detectors.

 ^{121}Cs Levels

E(level)	J^π^\dagger	$T_{1/2}^\dagger$
0.0	$3/2^{(+)}$	155 s 4
98.2 5		
99.2 5		
209.8 5		
210.8 4	$(7/2^+)$	

† From Adopted Levels.

 $\gamma(^{121}\text{Cs})$

E_γ^\dagger	I_γ^\dagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π
98.2 5	26 3	98.2		0.0	$3/2^{(+)}$
99.2 5	86 9	99.2		0.0	$3/2^{(+)}$
110.6 5	39 4	209.8		99.2	
111.6 5	100	209.8		98.2	
210.8 4	61 6	210.8	$(7/2^+)$	0.0	$3/2^{(+)}$

† From [1985IcZZ](#).

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Decay Scheme

Intensities: Relative I_γ

Legend

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

