

$^{72}\text{Se } \varepsilon \text{ decay }$ 1958Cu91,1965Hu02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni	NDS 111,1 (2010)		1-May-2009

Parent: ^{72}Se : E=0; $J^\pi=0^+$; $T_{1/2}=8.40$ d 8; $Q(\varepsilon)=361$ 5; % ε decay=100.0

γ and ce singles, x-x and x- γ coincidences measured ([1958Cu91](#)).

X- γ delayed coincidences ([1965Hu02](#)).

Others: [1950Ho26](#) and [1957Be46](#).

α : [Additional information 1](#).

 $^{72}\text{As Levels}$

E(level) [†]	J^π [†]	$T_{1/2}$	Comments
0 46.025 18	2^- 1^+	10.7 ns 3	$T_{1/2}$: from 1965Hu02 .

[†] From Adopted Levels.

 ε radiations

E(decay)	E(level)	$I\varepsilon$ [†]	Log ft	Comments
(315 5)	46.025	100 6	4.58 3	$\varepsilon K=0.8748$ 2; $\varepsilon L=0.1050$ 1; $\varepsilon M+=0.020198$ 23

[†] Absolute intensity per 100 decays.

 $\gamma(^{72}\text{As})$

$I(\gamma+ce)$ normalization: zero ε to g.s. assumed. ε observed to 46 level only.

E_γ	I_γ [†]	E_i (level)	J_i^π	E_f	J_f^π	Mult.	α	$I_{(\gamma+ce)}$ [†]	Comments
45.89 4	57.2 4	46.025	1^+	0	2^-	E1	0.747 11	100	$\alpha(K)\exp=0.63$ 6 $\alpha(K)=0.664$ 10; $\alpha(L)=0.0715$ 11; $\alpha(M)=0.01074$ 16; $\alpha(N)=0.000768$ 11; $\alpha(N+..)=0.000768$ 11 Mult.: from Adopted Gammas. E_γ : from Adopted Gammas, original value=46.0 3 (1958Cu91).

[†] Absolute intensity per 100 decays.

$^{72}\text{Se} \epsilon$ decay 1958Cu91,1965Hu02Decay SchemeIntensities: I_γ per 100 parent decays