

^{86}Ga β^- -n decay (43 ms) 2013Mi19

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen		NDS 116, 1 (2014)	31-Dec-2013

Parent: ^{86}Ga : $E=0$; $T_{1/2}=43$ ms $+21-15$; $Q(\beta^-n)=10600$ SY; $\% \beta^-n$ decay=60 10

^{86}Ga - $T_{1/2}$: Measured by 2013Mi19 from decay curve for γ rays.

^{86}Ga - $Q(\beta^-n)$: 10600 700 (syst,2012Wa38).

^{86}Ga - $\% \beta^-n$ decay: $\% \beta^-n=100$, $\% \beta^-n=60$ 10 and $\% \beta^-2n=20$ 10 for ^{86}Ga decay (2013Mi19).

2013Mi19: ^{86}Ga produced in U(p,F) reaction at 50 MeV using ISOL- HRIBF facility at ORNL. Ions of ^{86}Ga were extracted using resonant ionization laser ion source (RILIS). ^{86}Ga beam was transmitted to Radioactive Ion Beam Spectroscopy Station (LeRIBSS). Measured $E\gamma$, $I\gamma$, $\gamma\gamma$ -coin, $\beta\gamma$ -coin, $n\gamma$ -coin, P(n), P(2n).

 ^{85}Ge Levels

E(level)	J^π †	$T_{1/2}$	Comments
0	(3/2 ⁺ ,5/2 ⁺)	503 ms 18	$T_{1/2}$: from Adopted Levels.
107	(5/2 ⁺ ,3/2 ⁺)		
250			
472	(3/2 ⁺)		

† From Adopted Levels.

 $\gamma(^{85}\text{Ge})$

$I\gamma$ normalization: Absolute γ -intensities are given in 2013Mi19.

E_γ	I_γ †	$E_i(\text{level})$	J_i^π	E_f	J_f^π
107	19	107	(5/2 ⁺ ,3/2 ⁺)	0	(3/2 ⁺ ,5/2 ⁺)
250	7	250		0	(3/2 ⁺ ,5/2 ⁺)
365	4	472	(3/2 ⁺)	107	(5/2 ⁺ ,3/2 ⁺)

† Absolute intensity per 100 decays.

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Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays

Legend

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

