

^{82}Br IT decay [1965An01,1965Em02](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	J. K. Tuli, E. Browne	NDS 157, 260 (2019)		1-Mar-2019

Parent: ^{82}Br : E=45.9492 10; $J^\pi=2^-$; $T_{1/2}=6.13$ min 5; %IT decay=97.6 3

^{82}Br -%IT decay: from % β -=2.4 deduced from $\Sigma I\beta$ (6.13 min)/ $\Sigma I\beta$ (35.282 h) ([1965Em02](#)); no uncertainty given, 3% assumed .

 ^{82}Br Levels

E(level)	J^π [†]	$T_{1/2}$ [†]
0	5 ⁻	35.282 h 7
45.9492 10	2 ⁻	6.13 min 5

[†] From Adopted Levels.

 $\gamma(^{82}\text{Br})$

E_γ [†]	E_i (level)	J_i^π	E_f	J_f^π	Mult.	α [‡]	$I_{(\gamma+ce)}$ [#]	Comments
45.949 1	45.9492	2 ⁻	0	5 ⁻	M3	400	100	$\alpha(\text{exp})=382$ 75; $\alpha(\text{K})\text{exp}=251$ $\text{ce}(\text{K})/(\gamma+\text{ce})=0.718$ 8; $\text{ce}(\text{L})/(\gamma+\text{ce})=0.236$ 4; $\text{ce}(\text{M})/(\gamma+\text{ce})=0.0397$ 8 $\text{ce}(\text{N})/(\gamma+\text{ce})=0.00324$ 7 $\alpha(\text{K})=288$ 4; $\alpha(\text{L})=94.6$ 14; $\alpha(\text{M})=15.91$ 23 $\alpha(\text{N})=1.297$ 19 E_γ : 46 keV 2 from 1965Em02 . $\alpha(\text{K})\text{exp}$ from $I(\text{K x ray})/I_\gamma$ if $\omega(\text{K})=0.618$ (value of $\alpha(\text{K})\text{exp}$ of 1965An01 corrected by the evaluators for the improved value of $\omega(\text{K})$). $\alpha(\text{exp})$: from absolute I_γ compared to the total 6.13-min activity. The latter was determined from the activity of daughter ^{82}Br (35.282 h). Mult.: from $\alpha(\text{exp})$, $\alpha(\text{K})\text{exp}$.

[†] From adopted gammas since energy determined in IT decay is very uncertain.

[‡] [Additional information 1](#).

[#] For absolute intensity per 100 decays, multiply by 0.976 3.

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Decay Scheme

%IT=97.6 3

