

$^{65}\text{Se}$   $\varepsilon$  decay [2011RoZZ,1993Ba12](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 111, 2425 (2010)	1-Aug-2009

Parent:  $^{65}\text{Se}$ :  $E=0.0$ ;  $J^\pi=(3/2^-)$ ;  $T_{1/2}=33$  ms 4;  $Q(\varepsilon)=1.40\times 10^4$  6;  $\% \varepsilon + \% \beta^+$  decay=100.0

$^{65}\text{Se}$ - $T_{1/2}$ : From [2011RoZZ](#).

[2011RoZZ](#):  $^{65}\text{Se}$  activity produced by  $^{nat}\text{Ni}(^{78}\text{Kr},X)$  reaction with  $E(^{78}\text{Kr})=70$  MeV/nucleon. Measured p,  $\gamma$ .

[1993Ba12](#):  $^{65}\text{Se}$  activity produced by  $^{40}\text{Ca}(^{28}\text{Si}^{+6},3n)$  reaction with  $E(^{28}\text{Si})=175$  MeV. Measured p.

Other:[1995Hu24](#).

 $^{65}\text{As}$  Levels

E(level)	Comments
0.0	
3420 87	$\%p=100$ IAS. Decays to $^{64}\text{Ge}$ by p, $E(p)=3.52$ MeV 2 (weighted average of <a href="#">2011RoZZ</a> and <a href="#">1993Ba12</a> ). Other: 3.70 MeV 8 ( <a href="#">1995Hu24</a> ).

 $\varepsilon, \beta^+$  radiations

E(decay)	E(level)	$I\beta^+$ †	$I\varepsilon$ †	Log $ft$	$I(\varepsilon + \beta^+)$ †	Comments
$(1.06\times 10^4)$ 6	3420	48 15	0.057 21	3.57 20	48 15	av $E\beta=4.55\times 10^3$ 30; $\varepsilon K=0.00104$ 23; $\varepsilon L=0.000117$ 25; $\varepsilon M+=2.2\times 10^{-5}$ 5 $I(\varepsilon + \beta^+)$ , Log $ft$ : assumed super-allowed. $I\beta^+$ : from <a href="#">2011RuZZ</a> .

† Absolute intensity per 100 decays.