

Be($^{58}\text{Ni},\text{X}\gamma$) 2011Ho02

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen [#]		NDS 126, 1 (2015)	31-Mar-2015

2011Ho02: E(^{58}Ni)=550 MeV/nucleon beam was produced from the UNILAC-SIS accelerator complex at the GSI

Helmholtzzentrum für Schwerionenforschung mbH, Darmstadt, Germany. Target of 4 g/cm² Be. Reaction products were separated by a 70 m long fragment separator (FRS) and identified by time-of-flight and energy loss in the MUSIC detectors. γ -rays were detected by 15 high-resolution and high-efficiency CLUSTER germanium detectors. Measured E_γ , I_γ . Deduced levels, $T_{1/2}$.

 ^{43}Ti Levels

E(level)	J^π [†]	$T_{1/2}$	Comments
0	$7/2^-$		
312.7 2	$(3/2^+)$	11.7 μs 3	$T_{1/2}$: measured by 2011Ho02 , $\gamma(t)$. Adopted value of 11.9 μs 3 is given in 2011Ho02 based on averaging current value with literature value taken from ENSDF database.
1858	$(11/2^-)$		
2952	$(15/2^-)$		
3067	$(19/2^-)$	551 ns 7	$T_{1/2}$: measured by 2011Ho02 , $\gamma(t)$. Adopted value of 556 ns 5 is given in 2011Ho02 based on averaging current value with literature value taken from ENSDF database.

[†] From Adopted Levels.

 $\gamma(^{43}\text{Ti})$

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	α [†]	Comments
114.7 2	3067	$(19/2^-)$	2952	$(15/2^-)$	[E2]	0.201 4	B(E2)(W.u.)=4.82 8 $\alpha(\text{K})=0.181$ 3; $\alpha(\text{L})=0.0171$ 3; $\alpha(\text{M})=0.00216$ 4; $\alpha(\text{N})=0.0001071$ 17
312.7 2	312.7	$(3/2^+)$	0	$7/2^-$	[M2]	0.0048	B(M2)(W.u.)=0.072 2 $\alpha(\text{K})=0.00432$ 7; $\alpha(\text{L})=0.000400$ 6; $\alpha(\text{M})=5.12 \times 10^{-5}$ 8; $\alpha(\text{N})=2.73 \times 10^{-6}$ 4
1094	2952	$(15/2^-)$	1858	$(11/2^-)$	[E2]		
1858	1858	$(11/2^-)$	0	$7/2^-$	[E2]		

[†] [Additional information 1.](#)

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Level Scheme

