

^{161}Eu β^- decay 1986Ma12

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. W. Reich	NDS 112,2497 (2011)	1-Jun-2011

Parent: ^{161}Eu : E=0; $T_{1/2}=26$ s 3; $Q(\beta^-)=3705$ 60; $\% \beta^-$ decay=100.0

^{161}Eu - $T_{1/2}$: from ^{161}Eu Adopted Levels.

^{161}Eu - $Q(\beta^-)$: From the ^{161}Eu adopted values.

Additional information 1.

^{161}Eu produced by thermal-neutron fission of ^{235}U with isotope separation. γ singles, $\gamma\gamma$ coincidences, and x- γ coincidences measured with Ge detectors. Parent half-life from multiscaled γ singles.

 ^{161}Gd Levels

E(level)	J^π^\dagger	$T_{1/2}$	Comments
0.0	$5/2^-$	3.66 min 5	$T_{1/2}$: from ^{161}Gd Adopted Levels.
71.9 2	$7/2^-$		
163.7 2	$9/2^-$		
314.3 3	$3/2^-$		

† From ^{161}Gd Adopted Levels.

 $\gamma(^{161}\text{Gd})$

Since there are no I_γ values, the α values have not been included in the data fields. $\alpha(71.9)=5.3-8.9$ for M1,E2, $\alpha(91.9)=2.6 - 3.5$ for M1,E2, and $\alpha(163)=0.44$ for E2.

E_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π
71.9 2	71.9	$7/2^-$	0.0	$5/2^-$
91.9 2	163.7	$9/2^-$	71.9	$7/2^-$
163.7 2	163.7	$9/2^-$	0.0	$5/2^-$
^x 293.9 3				
314.3 3	314.3	$3/2^-$	0.0	$5/2^-$

^x γ ray not placed in level scheme.

$^{161}\text{Eu} \beta^- \text{ decay}$ 1986Ma12Decay Scheme