

Adopted Levels, Gammas

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Huo Junde, Huang Xiaolong, J. K. Tuli		NDS 106,159 (2005)	1-Apr-2005

Q(β^-)=3576 4; S(n)=5808 4; S(p)=14623 15; Q(α)=-10532 6 [2012Wa38](#)
 Note: Current evaluation has used the following Q record 3576 3 5808 3 1.492e+425-10622 168 [2003Au03](#).

⁶⁷Ni Levels

Cross Reference (XREF) Flags

- A ⁶⁷Co β^- decay (0.425 s)
- B ⁷⁰Zn(α ,⁷Be)
- C ⁷⁰Zn(¹⁴C,¹⁷O)
- D ²⁰⁸Pb(⁶⁴Ni,X)

E(level)	J ^{π}	T _{1/2}	XREF	Comments
0	(1/2) ⁻	21 s 1	ABCD	% β^- =100 μ =+0.601 5 (2000Ri14) μ : from NMR on oriented nuclei. T _{1/2} : from ⁶⁷ Ni β^- decay (1983Ru06). J ^{π} : Allowed β^- to ⁶⁷ Cu, 3/2 ⁻ (gs). From shell model configuration=(ν p _{1/2}) ⁻¹ . XREF: B(720)C(770). J ^{π} : from log ft 4.2 for β^- decay from (7/2 ⁻) level; γ to (1/2) ⁻ . Configuration=(ν f _{5/2}) ⁻¹ (1998Gr14). T _{1/2} : From 2003Ma50 . μ =0.56 3 XREF: B(1020). μ : from g=0.125 6 (2002Ge16,2004Ge11); J ^{π} : from assigned multipolarity and expected configuration=(ν g _{9/2}) (1998Gr14). T _{1/2} : from 1998Gr14 . Others: >0.3 μ s (1994Pa20,1994Pa32), >0.6 μ s (1997Is13).
694.1	(5/2) ⁻	150 ps 4	ABCD	
1007.2	(9/2) ⁺	13.3 μ s 2	AB D	
1140 30			C	
1710 22			B	
1970 40			C	
2155	(5/2) ⁻ †		A	
2390			C	
3680 50			C	

† Suggested by [1999We07](#) based on estimated log ft values.

γ (⁶⁷Ni)

E _i (level)	J _i ^{π}	E _{γ} †	I _{γ} †	E _f	J _f ^{π}	Mult.	Comments
694.1	(5/2) ⁻	694.1 1	100	0	(1/2) ⁻	(E2)	B(E2) \downarrow =1.46 4(2003Ma50) Mult.: expected E2 from Δ J and configuration (1998Gr14).
1007.2	(9/2) ⁺	313.1 1	100	694.1	(5/2) ⁻	(M2)	B(M2) \downarrow =0.047 (1998Gr14) Mult.: from comparison of measured T _{1/2} with Weisskopf estimate (1998Gr14). Similar isomeric transition in ⁶⁵ Fe.
2155	(5/2) ⁻	2155‡	100	0	(1/2) ⁻		

† From ²⁰⁸Pb(⁶⁴Ni,x), except as noted.

‡ From ⁶⁷Co β^- decay.

Adopted Levels, GammasLevel Scheme

Intensities: Relative photon branching from each level

