Adopted **Levels, Gammas**

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni	NDS 111,1 (2010)	1-May-2009

$Q(\beta^-)$=5557 *3*; S(n)=6891 *4*; S(p)=1.71×10^4 *5*; $Q(\alpha)$=−1.28×10^4 *4*   2012Wa38
Note: Current evaluation has used the following Q record 5557   *3 6891*   *4 1.74×10^4 9* −1.32×10^{48} 2007Ra27,2009Gu09.
$Q(\beta^-)$ from mass excess measurements of 2007Ra27 and 2007Gu09, S(n) from mass excess measurements of 2007Ra27.

^{72}Ni Levels

Cross Reference (XREF) Flags

A ^{72}Co β^- decay

E(level)	J^π	$T_{1/2}$	XREF	Comments
0.0	0^+	1.57 s *5*	A	%β^-=100
				$T_{1/2}$: from $\gamma(t)$ in 2001Fr21, other: 2.1 s *3* (1990Be13).
1096.0 *20*	$(2^+)^\dagger$		A	
1941 *3*	$(4^+)^\dagger$		A	
2396 *3*	$(6^+)^\dagger$		A	
3593 *4*	$(5^-,6^-,7^-)$		A	J^π: Possibly fed directly from $[6^-,7^-]$ in β^- decay.

† Possible members of the g.s. cascade.

$\gamma(^{72}$Ni$)$

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π
1096.0	(2^+)	1096 *2*	100	0.0	0^+
1941	(4^+)	845 *2*	100	1096.0	(2^+)
2396	(6^+)	455 *2*	100	1941	(4^+)
3593	$(5^-,6^-,7^-)$	1197 *2*	100	2396	(6^+)

Adopted Levels, Gammas

Legend

<u>Level Scheme</u>

Intensities: Type not specified

$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
● Coincidence

$^{72}_{28}$Ni$_{44}$