

Adopted Levels, Gammas

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Yang Dong, Huo Junde		NDS 128, 185 (2015)	10-Jul-2015

$Q(\beta^-) = -10520$  SY;  $S(n) = 14720$  SY;  $S(p) = 1080$  SY;  $Q(\alpha) = -7090$  SY [2012Wa38](#)

$\Delta Q(\beta^-) = 730$  \$  $\Delta S(n) = 200$  \$  $\Delta S(p) = 200$  \$  $\Delta Q(\alpha) = 260$  (2012Wa38) \$.

Populated by  $^{40}\text{Ca}(^{14}\text{N}, 2n)$  ([1997Ha04](#), [1990MiZK](#)), and  $\text{Ni}(^{58}\text{Ni}, X)$  ([1987Po04](#), [2007Do17](#)).

 $^{52}\text{Co}$  LevelsCross Reference (XREF) Flags

**A**  $^{52}\text{Ni}$   $\varepsilon$  decay

E(level)	$J^\pi$	$T_{1/2}$	XREF	Comments
0	(6 <sup>+</sup> )	104 ms 7	<b>A</b>	$\% \varepsilon + \% \beta^+ = 100$ ; $\% \beta^+ p = ?$ $T_{1/2}$ : from weighted average of 115 MS 23 ( <a href="#">1997Ha04</a> ) and 103 ms 7 ( <a href="#">2013Su07</a> ). $J^\pi$ : based on apparently allowed $\varepsilon$ to 6 <sup>+</sup> state in $^{52}\text{Fe}$ and analogy to $^{44}\text{V}$ (4 particles in f7/2 shell, 4 holes in f7/2 shell for $^{52}\text{Co}$ ).
(370 30)	2 <sup>+</sup>		<b>A</b>	E(level), $J^\pi$ : Based on 378, 2 <sup>+</sup> in mirror nucleus $^{52}\text{Mn}$ .
512	1 <sup>+</sup>		<b>A</b>	E(level), $J^\pi$ : Based on 546, 1 <sup>+</sup> in mirror nucleus $^{52}\text{Mn}$ .
2931 30	0 <sup>+</sup>		<b>A</b>	$J^\pi$ : Based on G to 1 <sup>+</sup> and B+ (from 0 <sup>+</sup> ) to the state.

 $\gamma(^{52}\text{Co})$ 

$E_i(\text{level})$	$J_i^\pi$	$E_\gamma$	$I_\gamma$	$E_f$	$J_f^\pi$
512	1 <sup>+</sup>	142.3 1		370?	2 <sup>+</sup>
2931	0 <sup>+</sup>	2418.3 3	100	512	1 <sup>+</sup>

**Adopted Levels, Gammas**Level Scheme

Intensities: Relative photon branching from each level

