

${}^{51}\text{V}({}^{12}\text{C},2\text{np}\gamma)$  1979Mo06,1975Iv04

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli		NDS 114, 1849 (2013)	31-Dec-2012

$E({}^{12}\text{C}) \approx 36$  MeV. RDM, DSAM and linear polarization. Ge(Li) polarimeter (1979Mo06).  
 $E({}^{12}\text{C}) = 32\text{-}42$  MeV. Measured recoil distance,  $\gamma\gamma$  (1975Iv04).

 ${}^{60}\text{Ni}$  Levels

E(level)#	$J^\pi$ ‡	$T_{1/2}$ †	Comments
0.0	$0^+$		
1332.0 10	$2^+$		
2159.0 15	$2^+$		
2505.0 15	$4^+$	0.9 ps +12-4	
2626.0 18	$3^+$	<0.7@ ps	
3119.0 15	$4^+$	<0.7@ ps	
4262.1 18	$6^+$	0.45 ps +11-21	$T_{1/2}$ : 187 ps 35 reported by 1975Iv04, see 1979Mo06 for comment. $J^\pi$ : positive parity from linear pol of the 1757 keV $\gamma$ (1979Mo06).
5345.1 20	$7^-$	0.29& ns 5	$J^\pi$ : negative parity from linear pol of the 1083 keV $\gamma$ (1979Mo06).
6807.1 23	$9^-$	0.52 ps +32-13	

† From 1979Mo06 by DSAM, except as noted.

‡ From Adopted Levels data set.

# As given by 1975Iv04.

@ From 1975Iv04 by RDM.

& From 1979Mo06 by RDM.

 $\gamma({}^{60}\text{Ni})$ 

$E_\gamma$	$I_\gamma$ †	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$
467	8	2626.0	$3^+$	2159.0	$2^+$
827	8.5	2159.0	$2^+$	1332.0	$2^+$
1083	15	5345.1	$7^-$	4262.1	$6^+$
1173	72	2505.0	$4^+$	1332.0	$2^+$
1332	100	1332.0	$2^+$	0.0	$0^+$
1462	5	6807.1	$9^-$	5345.1	$7^-$
1757	32	4262.1	$6^+$	2505.0	$4^+$
1787	15	3119.0	$4^+$	1332.0	$2^+$

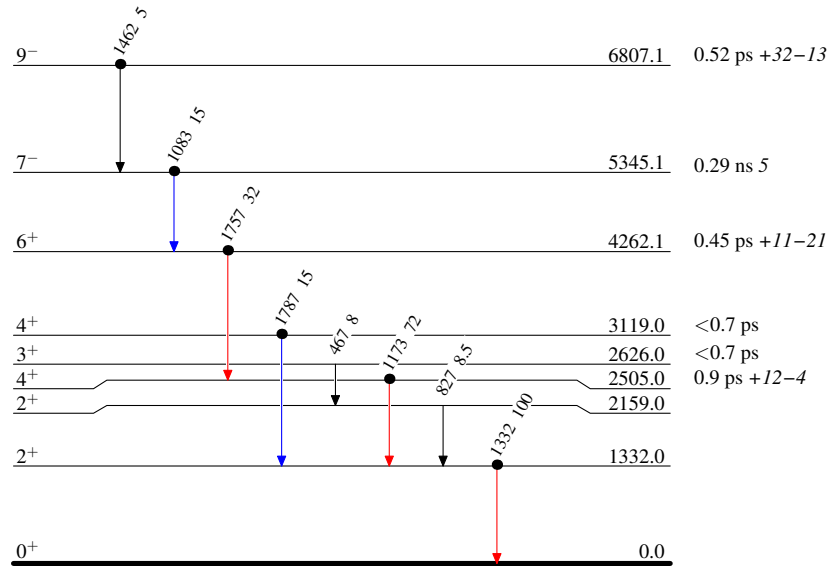
† Relative photon intensity at  $E({}^{12}\text{C}) = 38$  MeV (1975Iv04).

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Legend

Level Scheme  
 Intensities: Relative  $I_\gamma$

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

 $^{60}_{28}\text{Ni}_{32}$