

(HI,xn γ) 2003Wi07,1979Me03

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Huo Junde	NDS 110,2689 (2009)	31-Mar-2007

1979Me03: $^{28}\text{Si}(^{28}\text{Si},p2n\gamma)$, E=70-90 MeV, measured: γ , $\gamma\gamma$, $\gamma(\theta)$, yield. Observed weak (944.1 γ)(471.1 γ) coin. Assignment of reaction is tentative and is based only on the data for $\sigma(E(^{28}\text{Si}))$.

2003Wi07: $^{24}\text{Mg}(^{32}\text{S},p2n\gamma)$, E=95 MeV. Measured $E\gamma$, $I\gamma$, $\gamma\gamma\gamma$ using the Gammasphere array comprised of 101 Compton-suppressed HPGe detectors.

All data are from [2003WI07](#), except as noted.

 ^{53}Co Levels

E(level) [†]	J π [‡]	Comments
0 [#]	(7/2 ⁻)	
1327.0 [#]	9 (9/2 ⁻)	
2367.0 [#]	9 (11/2 ⁻)	
3200?	(19/2 ⁻)	E(level): not observed in 2003Wi07 , taken from 1976Vi02 .
3261.1 [#]	13 (13/2 ⁻)	
3581.1 [#]	17 (15/2 ⁻)	
4115.1 [#]	20 (17/2 ⁻)	

[†] From least-squares fit to $E\gamma$'s.

[‡] From mirror symmetry (with ^{53}Fe) arguments and similarity of spectra.

[#] Band(A): $\nu(f_{7/2})^{-2}\pi(f_{7/2})^{-1}$.

 $\gamma(^{53}\text{Co})$

Unplaced γ -ray from [1979Me03](#).

E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π
320	3581.1	(15/2 ⁻)	3261.1	(13/2 ⁻)
^x 471.1 [‡]				
534	4115.1	(17/2 ⁻)	3581.1	(15/2 ⁻)
894	3261.1	(13/2 ⁻)	2367.0	(11/2 ⁻)
^x 944.1 [‡]				
1040	2367.0	(11/2 ⁻)	1327.0	(9/2 ⁻)
1327	1327.0	(9/2 ⁻)	0	(7/2 ⁻)
1934 [‡]	3261.1	(13/2 ⁻)	1327.0	(9/2 ⁻)
2367	2367.0	(11/2 ⁻)	0	(7/2 ⁻)

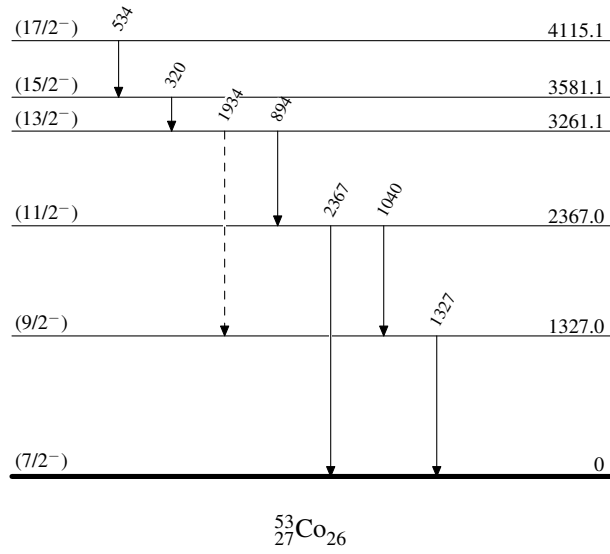
[†] Assuming $\Delta(E\gamma) = 1$ keV.

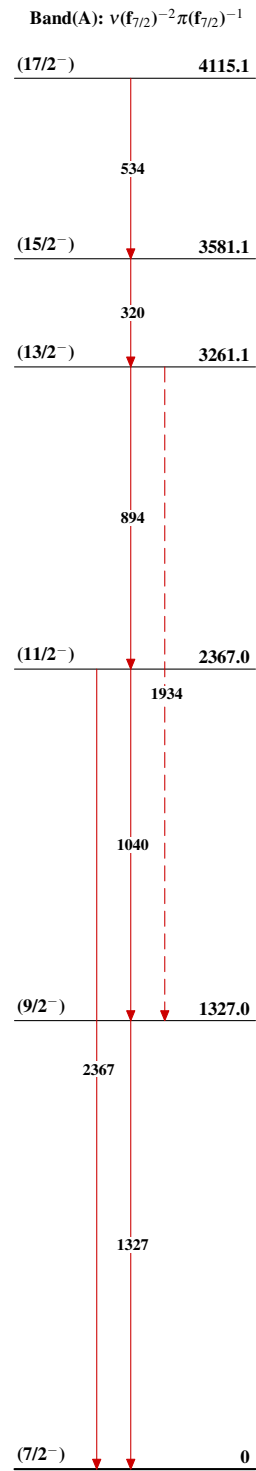
[‡] Placement of transition in the level scheme is uncertain.

^x γ ray not placed in level scheme.

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Legend

Level Scheme-----> γ Decay (Uncertain)

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