^{51}V(^{6}Li,3nγ),(^{7}Li,4nγ)   **1974Po15**

History

	Type	Author	Citation	Literature Cutoff Date
	Full Evaluation	Yang Dong, Huo Junde	NDS 121, 1 (2014)	20-Jun-2014

E=25 MeV, Ge(Li), measured $\gamma\gamma$-coincidence, σ(Eγ,θ).

^{54}Fe Levels

E(level)	J$^{\pi\dagger}$	Comments
0	0$^+$	
1408.6 *2*	2$^+$	
2538.9 *3*	4$^+$	
2950.5 *3*	6$^+$	
6381.5 *30*	8$^+$	J$^\pi$: probably high spin states belonging to Configuration=((π 1f$_{7/2}$)$^{+5}$(π 2p$_{3/2}$)) or Configuration=((π 1f$_{7/2}$)$^{+6}$(ν 1f$_{7/2}$)$^{-1}$(ν 2p$_{3/2}$)).
6527.7 *30*	10$^+$	J$^\pi$: see comment on preceding level.

† From adopted values.

γ(^{54}Fe)

E$_\gamma$	I$_\gamma^\dagger$	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult.	Comments
146.2 *2*	51	6527.7	10$^+$	6381.5	8$^+$		Mult.: A$_2$=14 *4*. Mult.: a stretched quadrupole transition.
411.6 *2*	27 *1*	2950.5	6$^+$	2538.9	4$^+$	Q	Mult.: A$_2$=23 *2*.
1130.3 *2*	52 *2*	2538.9	4$^+$	1408.6	2$^+$	Q	Mult.: A$_2$=22 *3*.
1408.6 *2*	76 *3*	1408.6	2$^+$	0	0$^+$	Q	Mult.: A$_2$=15 *3*.
3431.0 *30*	7 *2*	6381.5	8$^+$	2950.5	6$^+$		E$_\gamma$: 3431γ was not Doppler shifted.

† From angular distribution (three points) fitted only to Iγ/[1+A$_2$P$_2$(cos θ)].

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Level Scheme

Intensities: Relative I$_\gamma$

Legend

I$_\gamma <$ 2%×I$_\gamma^{max}$
I$_\gamma <$ 10%×I$_\gamma^{max}$
I$_\gamma >$ 10%×I$_\gamma^{max}$
● Coincidence

$^{54}_{26}$Fe$_{28}$