

$^{51}\text{V}(\alpha, \text{pn}\gamma)$  1991Ba37

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

 $J^\pi(^{51}\text{V})=7/2^-$ .E=30 MeV, HPGe FWHM 2.5-2.8 keV for 1332 keV, measured  $E_\gamma$ , DSAM. $^{53}\text{Cr}$  Levels

E(level)	$J^\pi^\dagger$	E(level)	$J^\pi^\dagger$	E(level)	$J^\pi^\dagger$	$T_{1/2}$
0.0	$3/2^-$	2233.3	$9/2^-$	3593.0	$13/2^-$ ‡	0.12 ps +6-5
1006.4	$5/2^-$	2705.8	$11/2^-$	4350.2	$15/2^-$	<0.12 ps
1289.5	$7/2^-$	2826.6	$11/2^-$	4697.0		0.26 ps 6
1536.6	$7/2^-$	3083.9	$15/2^-$	5002.4	$17/2^-$ ‡	0.10 ps +3-4
2172.3	$11/2^-$	3243.9	$13/2^-$			

† From Adopted Levels.

‡ From  $\gamma(\theta)$ , 1991Ba37. $\gamma(^{53}\text{Cr})$ 

$E_\gamma$	$I_\gamma$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult.†	$\delta$	Comments
247.1	8.8 5	1536.6	$7/2^-$	1289.5	$7/2^-$			
283.0	6.0 3	1289.5	$7/2^-$	1006.4	$5/2^-$			
378.1	<1.0	3083.9	$15/2^-$	2705.8	$11/2^-$			
530.1	17.7 9	1536.6	$7/2^-$	1006.4	$5/2^-$			
533.5	4.8 3	2705.8	$11/2^-$	2172.3	$11/2^-$			
593.3	11.1 11	2826.6	$11/2^-$	2233.3	$9/2^-$			
696.7	21.8 14	2233.3	$9/2^-$	1536.6	$7/2^-$			
757.2	6.8 7	4350.2	$15/2^-$	3593.0	$13/2^-$			
766.4	8.9 5	3593.0	$13/2^-$	2826.6	$11/2^-$	M1(+E2)	-0.17 +14-10	Additional information 1.
882.8	75 4	2172.3	$11/2^-$	1289.5	$7/2^-$			
911.6	62 4	3083.9	$15/2^-$	2172.3	$11/2^-$			
1006.4	33.3 17	1006.4	$5/2^-$	0.0	$3/2^-$			
1071.6	7.6 7	3243.9	$13/2^-$	2172.3	$11/2^-$			
1289.5	100 5	1289.5	$7/2^-$	0.0	$3/2^-$			
1536.7	2.3 2	1536.6	$7/2^-$	0.0	$3/2^-$			
1613.1	29 4	4697.0		3083.9	$15/2^-$			
1918.5	12.4 8	5002.4	$17/2^-$	3083.9	$15/2^-$	D+E2	0.11 +9-11	Additional information 2.

† From  $\gamma(\theta)$ , 1991Ba37.

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## Level Scheme

Intensities: Relative  $I_\gamma$ 

## Legend

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

