^{50}Ti(^{3}He,dγ), (d,nγ) 1970Mo12,1976Wh01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Wang Jimin and Huang Xiaolong	NDS 144, 1 (2017)	1-Mar-2016

All data from 1970Mo12, except as noted.

For ^{50}Ti(^{3}He,dγ)
1970Mo12: E=10 MeV, measured Eγ, Iγ, and σ(E(d),Eγ).
For ^{50}Ti(d,nγ)
1976Wh01: E=3.5-5 MeV, measured Eγ, γ(t) using a direct timing technique.

^{51}V Levels

E(level)†	$T_{1/2}$	Comments
0.0		
320.2 *7*		
929.1 *8*	<10 ps	$T_{1/2}$: from (1976Wh01). Other measurement: 70 ps *25* (1970Si21).
1607.0 *10*		
1813.1 *8*		
2410.7 *8*		
2547.1 *13*		
2678.1 *13*		
2699.0 *15*		

† From level scheme and Eγ's, using least-squares fit to data.

γ(^{51}V)

E_i(level)	E_γ	I_γ†	E_f	E_i(level)	E_γ	I_γ†	E_f	E_i(level)	E_γ	I_γ†	E_f
320.2	320 *1*	100	0.0	1813.1	1492 *1*	16# *7*	320.2	2547.1	1618 *1*	100‡	929.1
929.1	609 *1*	22 *4*	320.2		1814 *1*	84# *7*	0.0	2678.1	1749 *1*	100‡	929.1
	929 *1*	78 *4*	0.0	2410.7	2091 *1*	82‡ *6*	320.2	2699.0	1092 *1*	100@	1607.0
1607.0	1607 *1*	100‡	0.0		2410 *1*	18‡ *6*	0.0				

† % photon branching from each level.
‡ Other decay modes are <5%.
# Other decays modes are <3%.
@ Other decays modes are <6%.

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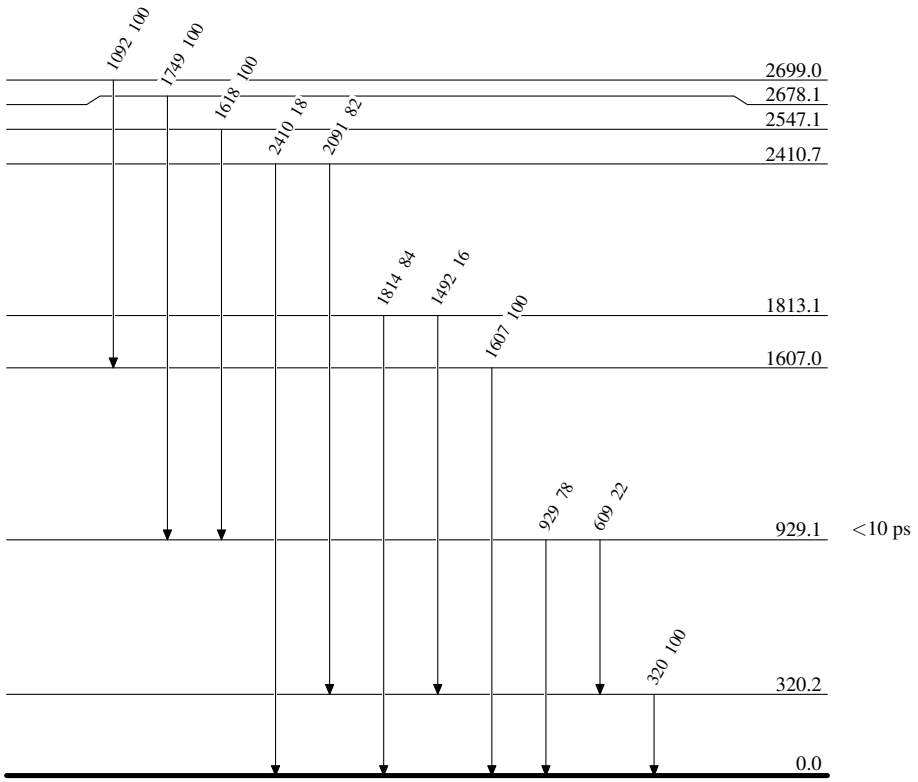
Level Scheme

Intensities: % photon branching from each level



$^{51}_{23}V_{28}$