^{39}K(^{7}Li,αnγ),^{40}Ca(^{3}He,2pγ) 1973Bi15

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja, E. A. Mccutchan	NDS 133, 1 (2016)	30-Sep-2015

1973Bi15: E(^{7}Li)=20 MeV, E(^{3}He)=14.5, 18 MeV from Tandem laboratory at Munich University. Measured Eγ, $\gamma\gamma$ coin, γ(t) with Ge(Li) detectors.

^{41}Ca Levels

E(level)	J$^{\pi}$[†]	T$_{1/2}$[‡]	Comments
0	7/2$^-$		
1942.7[#]	3/2$^-$		
2010.1[#]	3/2$^+$		
2462.5[#]	3/2$^-$		
2670.1[#]	1/2$^+$		
3050.1[#]			
3200.6[@]	9/2$^+$		
3369.0[@]	11/2$^+$	<2.8 ns	
3829.7[@]	15/2$^+$	3.8 ns *6*	
3914.2[@]	13/2$^+$		
5220.0	(13/2,17/2)$^+$		E(level): Populated only in (^{7}Li,αnγ).

[†] From Adopted Levels.
[‡] From γ(t).
[#] Populated strongly in (^{3}He,2pγ), weak in (^{7}Li,αnγ).
[@] Populated more strongly in (^{7}Li,αnγ) than in (^{3}He,2pγ).

γ(^{41}Ca)

E$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	E$_\gamma$[†]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$
168.4	3369.0	11/2$^+$	3200.6	9/2$^+$	1040.0	3050.1		2010.1	3/2$^+$
460.7	3829.7	15/2$^+$	3369.0	11/2$^+$	1390.3	5220.0	(13/2,17/2)$^+$	3829.7	15/2$^+$
519.8	2462.5	3/2$^-$	1942.7	3/2$^-$	1942.7	1942.7	3/2$^-$	0	7/2$^-$
545.2	3914.2	13/2$^+$	3369.0	11/2$^+$	2010.1	2010.1	3/2$^+$	0	7/2$^-$
660.0	2670.1	1/2$^+$	2010.1	3/2$^+$	3200.6	3200.6	9/2$^+$	0	7/2$^-$
727.4	2670.1	1/2$^+$	1942.7	3/2$^-$	3369.0	3369.0	11/2$^+$	0	7/2$^-$

[†] From level-energy differences.

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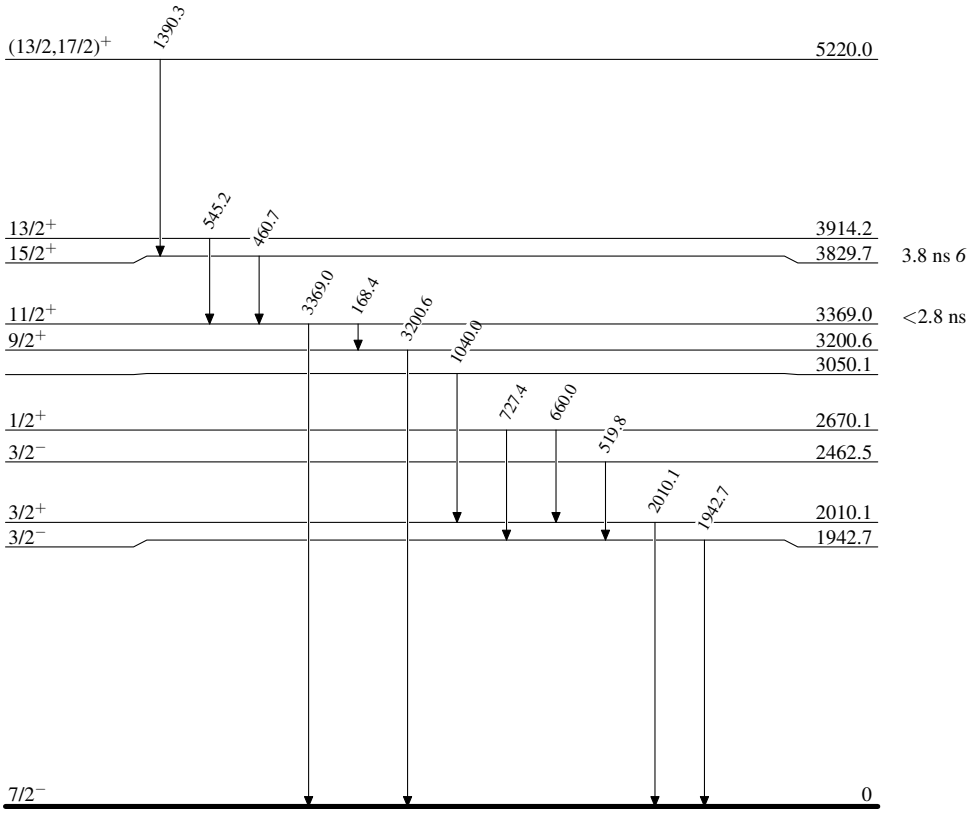
Level Scheme



$^{41}_{20}Ca_{21}$