

$^{39}\text{K}(\text{t},\text{p}\gamma)$ **1976Me09**

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

1976Me09: E(t)=3.0 MeV. Measured E γ , I γ , p γ coincidences using a Ge(Li) detector and an annular Si detector; deduced T $_{1/2}$ using Doppler Shift Attenuation Method (DSAM).

Others: [1982LiZI](#), [1975TaZL](#).

 ^{41}K Levels

E(level) [†]	J $^{\pi}$ [‡]	T $_{1/2}$ [#]	E(level) [†]	J $^{\pi}$ [‡]	T $_{1/2}$ [#]
0	3/2 ⁺		2448.2 15	(3/2 ⁺ , 5/2, 7/2 ⁺)	
979.6 6	1/2 ⁺	0.29 ps +21-10	2494.6 10	9/2 ⁺	
1293.1 6	7/2 ⁻	>3.5 ps	2508.8 10	7/2 ⁺	
1560.0 7	3/2 ⁺	0.40 ps 15	2528.9 8	11/2 ⁺	>4.9 ps
1582.5 6	3/2 ⁻	>1.0 ps	2712.4 10		
1594? 3	1/2 ⁺		2758.3 20		
1677.4 6	7/2 ⁺	>3.5 ps	2775.5 10	13/2 ⁺	
1697.7 6	5/2 ⁺	0.90 ps 28	3142.3 @ 10		
2141.7 12	5/2 ⁺		3213.0 10	5/2 ⁻	
2163.5 10	3/2 ⁻		3236.0 14		
2317.4 10	5/2 ⁻				

[†] As given in [1976Me09](#); authors report only the excitation energies of levels.

[‡] From the Adopted Levels.

[#] From DSAM measurements.

@ Single level report by [1976Me09](#), whereas in the Adopted Levels two levels near this energy are reported, one depopulated by the 633.5 γ and the other by the 1849 γ .

 $\gamma(^{41}\text{K})$

E γ [†]	E $_i$ (level)	J $_i^{\pi}$	E $_f$	J $_f^{\pi}$	E γ [†]	E $_i$ (level)	J $_i^{\pi}$	E $_f$	J $_f^{\pi}$
246.6	2775.5	13/2 ⁺	2528.9	11/2 ⁺	1419.3	2712.4		1293.1	7/2 ⁻
580.4	1560.0	3/2 ⁺	979.6	1/2 ⁺	1465.2	2758.3		1293.1	7/2 ⁻
602.9	1582.5	3/2 ⁻	979.6	1/2 ⁺	1560.0	1560.0	3/2 ⁺	0	3/2 ⁺
614	1594?	1/2 ⁺	979.6	1/2 ⁺	1582.5	1582.5	3/2 ⁻	0	3/2 ⁺
616.6	2758.3		2141.7	5/2 ⁺	1594	1594?	1/2 ⁺	0	3/2 ⁺
633.5	3142.3		2508.8	7/2 ⁺	1677.4	1677.4	7/2 ⁺	0	3/2 ⁺
796.9	2494.6	9/2 ⁺	1697.7	5/2 ⁺	1697.7	1697.7	5/2 ⁺	0	3/2 ⁺
817.2	2494.6	9/2 ⁺	1677.4	7/2 ⁺	1849.2	3142.3		1293.1	7/2 ⁻
831.4	2508.8	7/2 ⁺	1677.4	7/2 ⁺	1919.9	3213.0	5/2 ⁻	1293.1	7/2 ⁻
851.5	2528.9	11/2 ⁺	1677.4	7/2 ⁺	1942.9	3236.0		1293.1	7/2 ⁻
979.6	979.6	1/2 ⁺	0	3/2 ⁺	2141.6	2141.7	5/2 ⁺	0	3/2 ⁺
1014.7	2712.4		1697.7	5/2 ⁺	2163.4	2163.5	3/2 ⁻	0	3/2 ⁺
1024.3	2317.4	5/2 ⁻	1293.1	7/2 ⁻	2448.1	2448.2	(3/2 ⁺ , 5/2, 7/2 ⁺)	0	3/2 ⁺
1183.9	2163.5	3/2 ⁻	979.6	1/2 ⁺	2508.7	2508.8	7/2 ⁺	0	3/2 ⁺
1201.5	2494.6	9/2 ⁺	1293.1	7/2 ⁻	2758.2	2758.3		0	3/2 ⁺
1293.1	1293.1	7/2 ⁻	0	3/2 ⁺					

[†] Transitions reported in Figure 1 of [1976Me09](#), E γ from level-energy differences with E(level) from [1976Me09](#).

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Level Scheme

