^{87}Rb(α,3nγ) 1981Da04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan and A. A. Sonzogni	NDS 115, 135 (2014)	1-Nov-2013

1981Da04: E=30-55 MeV. Measured Eγ, Iγ, $\gamma\gamma$, $\gamma(\theta)$, and excitation functions using two Ge(Li) detectors (FWHM=2.5 keV at 1.33 MeV).
1980Kl01: E=40 MeV. Measured nuclear magnetic resonance detected by perturbed angular correlations (NMR/PAD) with two NaI(Tl) detectors. Deduced g factor of the 675 level.
1975Va16: E=40 MeV. Measured differential perturbed angular distribution with two Ge(Li) detectors. Deduced g factor and $T_{1/2}$ of 675 level.
1972Ra42: E=38 MeV. Measured Ice.

^{88}Y Levels

E(level)[†]	J$^\pi$[‡]	$T_{1/2}$	Comments
0	4^-		
232.1 *3*	5^-		
393.0 *3*	1^+		
674.9 *5*	8^+	13.9 ms *3*	g=+0.609 *6* g: from NMR/PAD (1980Kl01). Other: g=+0.598 *12* from TDPAD (1975Va16). $T_{1/2}$: from 1975Va16.
715.6	$(6)^+$		
843.6 *5*	$(5)^+$		
1284.2 *3*	$(3,4,5)^+$		J$^\pi$: assigned as 3^+ by 1981Da04.
1461.8 *5*	$(6^-,7^-,8^-)$		
1477.0 *6*	9^+		
2444.2 *5*	(10^+)		
3206.8 *6*			
3652.3 *6*	(11^-)		
3964.3 *6*	(12^-)		
4178.1 *7*	(13^-)		
4824.1 *8*	(14^-)		

[†] From a least-squares fit to Eγ by evaluators.
[‡] From the Adopted Levels.

$\gamma(^{88}Y)$

E$_\gamma$[†]	I$_\gamma$[‡]	E$_i$(level)	J$_i^\pi$	E$_f$	J$_f^\pi$	Mult.	Comments
128.0 *3*	≈2	843.6	$(5)^+$	715.6	$(6)^+$		
213.8 *3*	8.2 *8*	4178.1	(13^-)	3964.3	(12^-)		A_2=−0.45 *10* (1981Da04).
232.1 *3*	100 *5*	232.1	5^-	0	4^-	M1	K/(L+M)(exp)=7.6 *4* (1972Ra42). Mult.: M1 or E1 from K/(L+M), $\Delta\pi$=no from level scheme.
312.0 *3*	14.3 *14*	3964.3	(12^-)	3652.3	(11^-)		A_2=−0.32 *10* (1981Da04).
393.0 *3*	7.5 *6*	393.0	1^+	0	4^-		I(ce(K))(393γ)/I(ce(K))(443γ)=0.075 *25* (1972Ra42).
[x]395.5 *3*	5.7 *3*						
442.8 *3*	97 *4*	674.9	8^+	232.1	5^-	E3	K/(L+M)(exp)=6.8 *3* (1972Ra42). Mult.: E3 or M3 from K/(L+M), $\Delta\pi$=yes from level scheme.
646.0 *3*	6.8 *5*	4824.1	(14^-)	4178.1	(13^-)		A_2=−1.13 *21* (1981Da04).
802.1 *3*	21.4 *21*	1477.0	9^+	674.9	8^+		A_2=−0.64 *11* (1981Da04).
[x]944.2 *3*	8.8 *6*						
967.6[#] *3*	5.9 *5*	2444.2	(10^+)	1477.0	9^+		
1208.0 *3*	18.5 *16*	3652.3	(11^-)	2444.2	(10^+)		A_2=+0.41 *15* (1981Da04).

Continued on next page (footnotes at end of table)

^{87}Rb(α,3nγ) 1981Da04 (continued)

$\gamma(^{88}Y)$ (continued)

E_γ †	I_γ ‡	E_i(level)	J_i^π	E_f	J_f^π	Comments
1229.7 *3*	≈3	1461.8	$(6^-,7^-,8^-)$	232.1	5^-	
1284.2 *3*	≈3	1284.2	$(3,4,5)^+$	0	4^-	
1729.8 *3*	8.7 *7*	3206.8		1477.0	9^+	A_2=+0.8 *3* (1981Da04).
1769.2 *3*	47 *3*	2444.2	(10^+)	674.9	8^+	A_2=+0.38 *6* (1981Da04).

† From 1981Da04.
‡ Relative intensity at E=45 MeV (1981Da04).
# Placement of transition in the level scheme is uncertain.
x γ ray not placed in level scheme.

^{87}**Rb(α,3nγ)** **1981Da04**

Level Scheme

Intensities: Type not specified

Legend

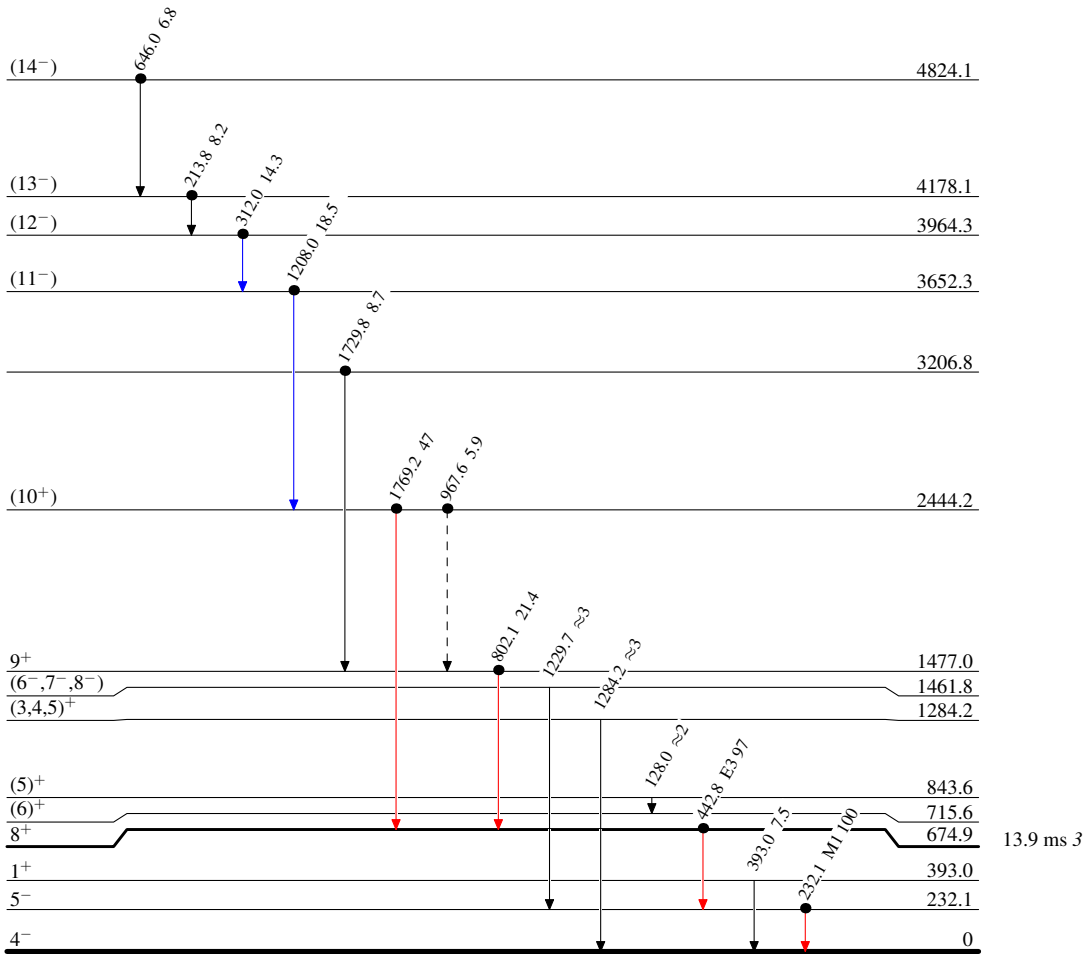
$I_\gamma < 2\% \times I_\gamma^{max}$

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

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

γ Decay (Uncertain)

Coincidence



$^{88}_{39}Y_{49}$