

$^{85}\text{Rb}(\alpha, 3n\gamma)$ 1984Da06

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Alexandru Negret, Balraj Singh		NDS 124, 1 (2015)	30-Nov-2014

1984Da06: E=30 MeV to 55 MeV. Measured E_γ , I_γ , $\gamma(\theta)$.

Additional information 1.

In addition to the level scheme given here, 1984Da06 reported a high-spin cascade which was later shown by 1985Li11 to be due to ^{86}Sr . Thus the following high-spin ($J=9-11$) levels (gammas) proposed by 1984Da06 are omitted here: 2134.5 (1690.2 γ), 2073.6 (1628.9 γ), 1699.8 (129.7 γ), 1570.1 (1125.4 γ), 1295.3 (850.6 γ), 1237.6 (338.1 γ), 899.5 (681.2 γ), 444.7 (226.4 γ).

The levels proposed at 507.8, 1022.0 and 1152.6 are also not seen in a tentative level scheme of 2000BuZW. The 1078.9 level is the only level above 302 level which may be common to a tentative 1074 level proposed by 2000BuZW.

 ^{86}Y Levels

E(level)	J^π [†]	Comments
0	4^-	
208.1 3	$(5)^-$	
302.3 5	(6^+)	
507.8? 5		
1022.0 5		
1078.9 5		J^π : 6 (1984Da06).
1152.6 5		

[†] From Adopted Levels.

 $\gamma(^{86}\text{Y})$

E_γ	I_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Comments
^x 78.0 3	1.3 1					
94.2 3	5.8 6	302.3	(6^+)	208.1	$(5)^-$	$A_2 = -0.52$ 14.
208.1 3	100 10	208.1	$(5)^-$	0	4^-	$A_2 = -0.19$ 20.
299.7 [‡] 3	1.0 1	507.8?		208.1	$(5)^-$	$A_2 = -0.57$ 34.
813.9 3	0.4	1022.0		208.1	$(5)^-$	
870.8 3	4.2 4	1078.9		208.1	$(5)^-$	$A_2 = -0.34$ 19.
944.5 3	2.9 3	1152.6		208.1	$(5)^-$	

[†] At E=50 MeV.

[‡] Placement of transition in the level scheme is uncertain.

^x γ ray not placed in level scheme.

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Legend

Level Scheme
Intensities: Relative I_γ

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- γ Decay (Uncertain)

