

$^{79}\text{Br}(\alpha, 3n\gamma)$ 1977Be41

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	NDS 105, 223 (2005)	22-Jun-2005

Includes $^{79}\text{Br}(^3\text{He}, 2n\gamma)$.

1977Be41: E=30-55 MeV. Measured γ , $\gamma\gamma$, $\gamma(\theta)$, $\gamma(t)$ and excitation functions.

Other:

1996Io01: $^{79}\text{Br}(^3\text{He}, 2n\gamma)$ E=25 MeV. Measured $\gamma(\theta, H, t)$, g factor of (6^+) microsecond isomer at 494 keV; see 'Adopted Levels'.

 ^{80}Rb Levels

E(level) [†]	J^π [†]	$T_{1/2}$	Comments
0.0	1 ⁺		
175.5 3	(2)		J^π : from Adopted Levels; J=1 proposed by 1977Be41.
334.8 4	(3)		
376.0 3	(3 ⁺)		
418.5 5	(4)		
423.0? 5	(4)		E(level): 398 In ($^{19}\text{F}, 3n\alpha\gamma$) (1992Do10) due to reverse ordering of the 63.0-88.2 cascade.
470.4 5			
472.7 3	(4)		
486.0 6	(5)		
496.3 6	(5)	8 ns 2	$T_{1/2}$: $\gamma(t)$ (1977Be41).

[†] Tentative assignments from $\gamma(\theta)$ (1977Be41). The assignments are the same in 'Adopted Levels', except that some of these are placed in parentheses there.

[‡] From least-squares fit to $E\gamma$'s.

 $\gamma(^{80}\text{Rb})$

E_γ	I_γ	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult.	Comments
63.0 [†] 3	4.0 4	486.0	(5)	423.0?	(4)	D	$A_2=-0.44$ 10.
77.8 3	1.1 1	496.3	(5)	418.5	(4)		
83.7 3	2.2 2	418.5	(4)	334.8	(3)		$A_2=-0.02$ 14. $T_{1/2}=8$ ns 2 given for 83.7 γ is most likely contributed by the half-life of the feeding 77.8 γ .
88.2 [†] 3	6.2 6	423.0?	(4)	334.8	(3)	D	$A_2=-0.30$ 6.
96.6 3	3.5 4	472.7	(4)	376.0	(3 ⁺)	D	$A_2=-0.32$ 7.
135.6 3	1.0 1	470.4		334.8	(3)		
159.3 3	28 3	334.8	(3)	175.5	(2)	D	$A_2=-0.63$ 5.
175.6 3	30 3	175.5	(2)	0.0	1 ⁺	D	$A_2=-0.51$ 8.
200.6 3	3.1 3	376.0	(3 ⁺)	175.5	(2)	D	$A_2=-0.25$ 4.
297.3 [‡] 3	≤ 0.5	472.7	(4)	175.5	(2)		
375.9 3	4.1 4	376.0	(3 ⁺)	0.0	1 ⁺		$A_2=+0.40$ 15.

[†] Ordering of the 63.0-88.2 cascade is reversed In ($^{19}\text{F}, 3n\alpha\gamma$) (1992Do10) and In other In-beam γ -ray studies (2003We13, 1998Ta07).

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

