

Adopted Levels, Gammas (continued) ^{34}Ar Levels (continued)

E(level)	J^π	XREF	Comments
5255? 4		C	
5307 13	(5 ⁻)	DE	J^π : L($^3\text{He},n$)=(5).
5542 4		C	
5620 30	2 ⁺	D	J^π : L($^3\text{He},n$)=2.
5909 12	0 ⁺	DE	J^π : L($^3\text{He},n$)=0.
6074 11	2 ⁺	E	J^π : L(p,t)=2.
6525 9	2 ⁺	DE	J^π : L(p,t)=2.
6794 11		DE	
6990 50		D	
7322 6	2 ⁺	DE	J^π : L(p,t)=2.
7499 4	(2 ⁺)	E	J^π : L(p,t)=(2).
7925 5		E	

[†] From DSAM in $^3\text{He}(^{32}\text{S},n\gamma), ^{32}\text{S}(^3\text{He},n\gamma)$. Most values are from 1985Al18.

 $\gamma(^{34}\text{Ar})$

$E_i(\text{level})$	J_i^π	E_γ [†]	I_γ [†]	E_f	J_f^π	Mult. [†]	δ [†]	Comments
2091.1	2 ⁺	2091.1 3	100	0	0 ⁺	E2		B(E2)(W.u.)=6.8 9
3287.7	2 ⁺	1196.6 4	100 5	2091.1	2 ⁺	M1+E2	+0.12 5	B(M1)(W.u.)=0.060 12; B(E2)(W.u.)=2.4 20
		3286 4	9 6	0	0 ⁺	[E2]		B(E2)(W.u.)=0.10 7
3873	0 ⁺	585 [#]	<43	3287.7	2 ⁺			
		1782 3	100	2091.1	2 ⁺	[E2]		B(E2)(W.u.)<21
4127.8		840.1 9	100 6	3287.7	2 ⁺			
		2037	11 6	2091.1	2 ⁺			
		4128 [#]	<11	0	0 ⁺			
4513.2	3 ⁻	1225.5 6	100 11	3287.7	2 ⁺	[E1]		B(E1)(W.u.)=0.0016 4
		2422	11 3	2091.1	2 ⁺	[E1]		B(E1)(W.u.)=2.2×10 ⁻⁵ 8
4631		2540	100	2091.1	2 ⁺			%I _γ >50.
4865		2774	100	2091.1	2 ⁺			%I _γ >50.
4967	0 ⁺	841 [#]	<20	4127.8				
		2876	100	2091.1	2 ⁺			%I _γ >50.
5255?		3164 [#]	100	2091.1	2 ⁺			%I _γ >50.
5542		911	54 [‡] 16	4631				
		1029	100 [‡] 16	4513.2	3 ⁻			

[†] From $^3\text{He}(^{32}\text{S},n\gamma), ^{32}\text{S}(^3\text{He},n\gamma)$.

[‡] Tentative value of branching ratio.

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

Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

-----► γ Decay (Uncertain)

