

$^{13}\text{C}(^6\text{Li},\text{p})$ 1988Sm01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Tilley, Weller, Cheves, Chasteler		NP A595, 1 (1995)	31-Oct-1994

Target: 99% enriched ^{13}C . Projectile ^6Li , E=28.0 MeV.

 ^{18}O Levels

E(level)	$J^{\pi\dagger}$	$\sigma(\text{tot})^{\ddagger}$	Comments
0.0	0^+	6.1 UB 3	
1987. 8	2^+	39 UB 1	
3555. 10	4^+	56 UB 1	
3632. 15	0^+	13 UB 1	
3926. 6	2^+	36 UB 1	
4455. 8	1^-	46 UB 1	
5095. 11	3^-	74 UB 1	
5256. 9	2^+	44 UB 1	
5374. 8	3^+	35 UB 1	
5532. 8	2^-	45 UB 1	
6199. 8	1^-	37 UB 1	
6383. 11		131 UB 2	Unresolved doublet. J^{π} assignments are $(2^-), 3^-$ for the 6351 and 6404 keV levels respectively.
6882. 19	0^-	5.3 UB 4	
7117. 5	4^+	208 UB 2	
7618. 10	1^-	33 UB 1	
7764. 14	2^-	37 UB 1	
7850. 13	5^-	101 UB 1	
7962. 12	$(3^+, 4^-)$	84 UB 1	
8026. 14	1^-	19 UB 1	
8120. 12	5^-	140 UB 2	
8200. 17	2^+	48 UB 1	
8274. 15	3^-	103 UB 2	
8401. 12		45 UB 1	
8496. 15		75 UB 1	
8667. 13			$\sigma(\text{max})=20.8$ 10 $\mu\text{b/sr}$.
8.82×10^3 2			$\sigma(\text{max})=13.0$ 9 $\mu\text{b/sr}$.
8.96×10^3 2			$\sigma(\text{max})=16.3$ 10 $\mu\text{b/sr}$.
9.72×10^3 3			$\sigma(\text{max})=26.3$ 13 $\mu\text{b/sr}$.
10.09×10^3 3	3^-		$\sigma(\text{max})=30.6$ 15 $\mu\text{b/sr}$.
10.28×10^3 3	4^+		$\sigma(\text{max})=100$ 5 $\mu\text{b/sr}$.
10.63×10^3 3			$\sigma(\text{max})=31.3$ 16 $\mu\text{b/sr}$.
10.90×10^3 3			$\sigma(\text{max})=42.7$ 21 $\mu\text{b/sr}$.
10.99×10^3 2			$\sigma(\text{max})=84.8$ 42 $\mu\text{b/sr}$.
11.12×10^3 2			$\sigma(\text{max})=17.7$ 9 $\mu\text{b/sr}$.
11.26×10^3 2			$\sigma(\text{max})=33.9$ 17 $\mu\text{b/sr}$.
11.42×10^3 3	4^+		$\sigma(\text{max})=46.6$ 23 $\mu\text{b/sr}$.
11.61×10^3 3	5^-		$\sigma(\text{max})=34.1$ 17 $\mu\text{b/sr}$.
11.70×10^3 3	6^+		$\sigma(\text{max})=75.4$ 38 $\mu\text{b/sr}$.
11.85×10^3 3	(3^-)		$\sigma(\text{max})=81.9$ 41 $\mu\text{b/sr}$.
12.07×10^3 3	(2^+)		$\sigma(\text{max})=34.2$ 17 $\mu\text{b/sr}$.
12.23×10^3 3	(1^-)		$\sigma(\text{max})=32.1$ 16 $\mu\text{b/sr}$.
12.33×10^3 3	5^-		$\sigma(\text{max})=50.4$ 25 $\mu\text{b/sr}$.
12.44×10^3 3			$\sigma(\text{max})=96.0$ 48 $\mu\text{b/sr}$.
12.54×10^3 3	6^+		$\sigma(\text{max})=90.2$ 45 $\mu\text{b/sr}$.
13.08×10^3 3	1^-		$\sigma(\text{max})=48.4$ 24 $\mu\text{b/sr}$.

Continued on next page (footnotes at end of table)

 $^{13}\text{C}(^6\text{Li},\text{p})$ [1988Sm01](#) (continued)

 ^{18}O Levels (continued)

E(level)	J^π [†]	Comments
13.23×10 ³ 3		$\sigma(\text{max})=99.3$ 50 $\mu\text{b/sr}$.
13.48×10 ³ 3		$\sigma(\text{max})=24.6$ 12 $\mu\text{b/sr}$.
13.60×10 ³ 3		$\sigma(\text{max})=29.0$ 15 $\mu\text{b/sr}$.
13.81×10 ³ 3	1 ⁻	$\sigma(\text{max})=159$ 8 $\mu\text{b/sr}$.
14.14×10 ³ 3		$\sigma(\text{max})=92.7$ 46 $\mu\text{b/sr}$.
15.80×10 ³ 3	1 ⁻	$\sigma(\text{max})=136$ 7 $\mu\text{b/sr}$.

[†] Assignments are from Adopted Levels of [1987Aj02](#).

[‡] The total cross sections generally agree with a (2J+1) relationship.