^{28}Si(t,p) 1986Al06,1973Ba50

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 111, 2331 (2010)	30-Jun-2010

1986Al06: Natural Si target; Projectile t, E=18 MeV; Enge spectrograph; Reported level energies, L values.
1973Ba50: 95% enriched ^{28}Si target; Projectile t, E=6 MeV; Magnetic spectrograph; Reported level energies, L values. In 1973Ba50, the ^{29}Si(d,p)^{30}Si reaction was also used to study the ^{30}Si levels.

^{30}Si Levels

E(level)†	Jπ#	L†	Comments
0	0^+	0	
2235‡	2^+	2	
3499‡	2^+	2	
3769‡	1^+		
3788‡	0^+		
4809‡	2^+		
4831‡	3^+		
5220 *10*	3^+		E(level): from 1973Ba50.
5280‡	4^+	4	
5372‡	0^+		
5487‡	3^-	3	
5613‡	2^+	2	
5950	4^+		
6503	4^-		
6541‡	2^+	2	
6641‡	0^+	0	
6744‡	1^-	1	
6865	3^+		
6915‡	(2^+)	(2)	
6990 *10*			E(level): from 1973Ba50.
7043‡	5^-	5	
7070 *10*	3^+		E(level): from 1973Ba50.
7223 *2*	4^+		
7256‡ *2*	2^+	2	
7446 *10*	0^+	0	
7500 *10*	2^-		E(level): from 1973Ba50.
7613 *10*		2	L: for doublet.
7660 *10*	$(1,2)^+$		E(level),Jπ: from 1973Ba50 and Adopted Levels, respectively.
7800 *10*	4^+	4	
7894 *10*	2^+	2	
8097 *10*	(0^+)	(0)	
8163 *10*	1^-	1	
8204 *10*	5^-	5	
8453 *10*	3^-	3	
8564 *10*	3^-	3	
8681 *10*	2^+	2	
8893 *10*	$(2^+,3^-)$	(2,3)	
8938 *10*	$(2^+,3^-)$	(2,3)	
8962 *10*	(5^-)	(5)	
9168 *10*	(3^-)	3	
9411 *10*	4^+	4	
9881 *10*	4^+	4	

Continued on next page (footnotes at end of table)

^{28}Si(t,p) 1986Al06,1973Ba50 (continued)

^{30}Si Levels (continued)

E(level)[†]	Jπ[#]	L[†]
10052 *10*	4^+	4
10680 *10*	6^+	6
10728 *10*	(5^-)	5
10909 *10*	(2^+)	(2)
11003 *10*	2^+	2

† From 1986Al06, except otherwise noted. In 1986Al06, level energies up to 7256 keV were quoted from the evaluation 1978En02.
‡ Level energy quoted from Adopted Levels (approximately). In 1986Al06, the level energy is quoted from the evaluation of 1978En02.
# From L values.