^{29}Si(p,t) 1974Na14,1977Be13

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. Shamsuzzoha Basunia	NDS 112, 1875 (2011)	30-Nov-2010

1974Na14: ^{29}Si(p,t), E=40.1 MeV; measured σ(E(t),q), σ(E(^{3}He),q); Deduced levels, J, π, L, t. Target: SiO and SiO_2, enriched to 95% in ^{29}Si.

1977Be13: ^{29}Si(p,t), E=40.2 MeV; double proportional counter and thin plastic scintillator; triton spectra taken at 6°, 18°, 24°; deduced Q value and an excitation energy of level at 6628 keV.

^{27}Si Levels

E(level)[†]	J$^\pi$[#]	L[#]	Comments
0	5/2$^+$	2	
780.9 *2*	1/2$^+$	0	
957.4 *2*	3/2$^+$	2	
2163.6 *2*	7/2$^+$	4	
2647.6 *3*	5/2$^+$	2	
2866.3 *3*	3/2$^+$	2	
2909.9 *2*	9/2$^+$	4	
3540.2 *11*	1/2$^+$	0	
3803.6 *11*	3/2$^+$	2	
4289.2 *9*	5/2$^+$	2	
4703.8[‡] *11*		2	
5062[‡] *2*		2	
5208[‡] *2*			
5497[‡] *2*			
6628 *5*	1/2$^+$	0	T=3/2 The T=3/2 assignment is based on the large intensity of the corresponding (p,t) L=0 transition (1977Be13).

[†] Quoted from Adopted Levels. Levels reported in 1974Na14, except otherwise noted.

[‡] Level energies reported in 1974Na14 as 4.72 MeV (J$^\pi$=5/2$^+$), 5.08 MeV, 5.24 MeV (J$^\pi$=1/2$^-$,3/2$^-$), and 5.52 MeV (J$^\pi$=5/2$^+$).

[#] Assignment from 1974Na14, based on angular distribution of triton and deduced L values.