^{30}Si(p,p′) 1960Wh04

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia, A. Chakraborty	NDS 197,1 (2024)	31-May-2024

Other: 1960Wa15 (p,p′γ).

1960Wh04: Natural SiO_2 target, E_p=8.588, 8.001, and 7.446 MeV; measured proton spectra at 30°, 50°, 90°, and 130° with the MIT broad-range magnetic spectrograph. Deduced excited levels. FWHM=7.5 keV.

1974Wa19: 1.5 mg/cm^2 $^{30}SiO_2$ target, evaporated onto a 13 mg/cm^2 Ag foil was bombarded by 7.0-MeV protons from the Brookhaven National Laboratory (BNL) MP tandem Van de Graaff facility and e^+-e^- pairs were observed with the BNL magnetic-lens intermediate-image pair spectrometer; deduced E0 transition strength for 0^+ to 0^+ (3788 to g.s.).

^{30}Si Levels

E(level)[†]	Jπ	Comments
0	0^+	E(level),Jπ: from the Adopted Levels.
2232 *6*	2^+	
3493 *6*		
3765 *6*		
3785 *6*	0^+	(2.7 *4*) × 10^3 − measured e-e pair emission to 0^+ g.s. (1974Wa19). B(E0)=0.054 *9* (s.p.) (1974Wa19 − using τ=15.8 ps *13*). Jπ: from the Adopted Levels.
4805 *6*		
4827 *6*		
5220 *7*		
5365 *7*		
5477 *7*	3^-	
5610 *7*		

[†] From 1960Wh04.