^{72}Ge(t,p) 1978La12

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Ameenah R. Farhan	NDS 107, 1923 (2006)	30-Apr-2006

1978La12: E=15 MeV. Measured $\sigma(\theta)$ from 3.75° to 86.25° (lab system) in steps of 7.5°. FWHM=20 keV. Absolute cross sections accurate to 40%. DWBA analysis and calculations.

Others: 1979Le07, 1984Mo07, 1964Da21, 1982VeZU, 1981St18.

1979Le07, 1978Ve03: E=17 MeV. Resolution=15 keV. $\sigma(\theta)$ data from 10° to 60° (lab system) in steps of 5°. Absolute cross sections accurate to 30%. DWBA calculations. Only 18 levels reported.

1984Mo07: E=15 MeV. Absolute cross sections for the first two 0^+ states measured.

1964Da21: E=13 MeV. Cross sections for the first two 0^+ levels measured.

See 1989Ca02, 1984Fo17, 1984Ca30 for analysis of two neutron transfer data.

^{74}Ge Levels

E(level)	L	E(level)	L	E(level)	L	E(level)	L
0	0	2695?† *3*		3438 *4*	(0,1)	4210 *18*	2
597 *3*	2	2711 *6*	(4)	3492 *2*		4287 *11*	2
1206 *6*	2	2758 *6*	0	3576 *6*	2	4330 *10*	(4)
1464#		2836 *7*	2	3642 *2*	(4)	4356 *13*	4
1485 *4*	0	2867?† *7*		3683 *4*	5	4377 *13*	(2)
1695?† *3*		2933@ *3*		3733 *11*	4	4422 *13*	2
1913‡ *14*	0	2949 *4*	(4)&	3779 *5*	0	4496 *5*	4
2164‡ *6*	0[a]	3011 *7*	2	3824 *5*	2	4538 *10*	2
2205 *8*	2	3051 *5*	4	3874 *6*	(2)	4586 *9*	4
2229 *4*	0	3108 *4*	5	3918 *6*	0	4631 *8*	(0+2)
2538 *5*	3	3144 *3*	3	3953 *8*	2	4687 *8*	(0+2)
2565?† *3*		3219 *8*	4	4020 *9*	2	4767 *11*	(0,1)
2610 *14*	(0)[b]	3356 *3*	0	4085 *6*		4853 *8*	(0+2)
2674 *2*	4	3391 *6*	2	4169 *8*	3		

† From 1979Le07 only. Treated as uncertain by evaluators.

‡ Weakly populated level.

Obscured by 1485 peak.

@ Unresolved from 2949 peak.

& 1979Le07 give L=(2) for this group.

[a] L-value may be suspect. In (p,p′) and (p,t) L=1 level observed at this energy.

[b] $\sigma(\theta)$ could fit L=1+2 also to correspond to 2^+,1^- doublet in (p,t) and (p,p′).