^{74}Ge(t,p) 1978Mo24

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Jun Chen and Ameenah R. Farhan	NDS 194,3 (2024)	8-Jan-2024

E=15 MeV.

1978Mo24 (also 1989Ca02,1984Mo07,1984Fo17,1984Ca30): $\sigma(\theta)$ data at 3.75° to 86.25° (lab) in steps of 7.5°. FWHM=20 keV. Absolute cross sections accurate to 25%. DWBA analysis. The following configurations were assumed for various L-transfers: $1g^2_{9/2}$ for L=0 and 2; $1g^2_{9/2}$ and $1g^2_{7/2}$ for L=4; $(2p_{1/2},2d_{3/2})$ for L=1; $(2p_{1/2},2d_{5/2})$ for L=3 and $(2p_{1/2},1g_{9/2})$ for L=5.

1984Mo07 (and 1989Ca02) give absolute cross sections (at 4.1° c.m.) for 0^+ states.

Others:

1979Le07: E=17 MeV. Measurements agree with those given by 1978Mo24.

Level	Cross section data dσ/dΩ (max) μb/sr (1978Mo24)	Σ(dσ/dΩ) μb (1979Le07)
0		2210
562	87	372
1109	9	32
1411	9	26
1911	180	100
2017	5	12
2502	27	81
2693	58	303
2733	8	74
2766	7	33
2841	35	132
2901	76	53
2957	38	255
2995	72	293
3040	13	
3142	17	
3191	27	
3231	34	
3314	9	
3393	8	
3472	91	
3539	110	
3648	30	
3718	<14	
3798	<9	
3890	91	

^{76}Ge Levels

E(level)	L	Absolute σ (mb/sr)†	Comments
0	0	4.58 *10*	
562 *5*	2		
1109 *5*	2		
1411 *5*	4		$\sigma(\theta)$ data indicate contribution from $1g^2_{7/2}$.
1911 *5*	0	0.229	
2017 *5*	(4)		
2502 *5*	2		
2693 *5*	3		
2733 *5*	4		

Continued on next page (footnotes at end of table)

^{74}Ge(t,p) 1978Mo24 (continued)

^{76}Ge Levels (continued)

E(level)	L	Absolute σ (mb/sr)[†]	Comments
2766 *5*	2		
2841 *5*	2		
2901 *5*	0	0.097	
2957 *5*	5		
2995 *5*	4		
3040 *5*	2		
3142 *5*	2		
3191 *5*	(2,3)		
3231 *5*	4		
3314 *5*		0.011	Mixture of L=0,1 and L=3,4 components indicate a doublet.
3393 *5*	(4)		
3472 *5*		0.114	Fitted by L=1 alone or by a mixture of L=0 and higher L values.
3539 *5*		0.140	Mixture of L=0,1 and L=3,4 components indicate a doublet.
3648 *5*	(2)		
3718 *10*			
3798 *10*			
3890 *5*			

[†] Values are at 4.1° (c.m.) (1984Mo07).