^{74}Ge(p,p′),(pol p,p′) 1982Ta16

History

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

1982Ta16: ^{74}Ge(p,p′) E=22 MeV, measured $\sigma(\theta)$ (10°−110°), DWBA and coupled-channel calculations, FWHM=10 keV.
Others:
1993Mo05: ^{74}Ge(pol p,p′) E=22.3 MeV, measured $\sigma(\theta)$ and $A_y(\theta)$ for first 0^+, 2^+, 4^+ and 3^- states and second 2^+ state. Coupled calculations. Also 1986MoZR by the same group.
^{74}Ge(p,p′): 1970Cu03, 1967Br10, 1964Da21.
^{74}Ge(pol p,p′): 1985Se05.
Model calculations and analysis: 1970Pe09, 1984Ba71, 1992Ke07.

^{74}Ge Levels

E(level)	L	Comments
0		
595 *5*	2	β_2=0.29 (CCBA), 0.25 (DWBA) (1982Ta16). β_2=0.29 (1970Pe09) (DWBA), 0.208 *10* (CCBA) (1985Se05), 0.27 *1* (1986MoZR).
1203 *5*	2	β_2=0.07 (CCBA), 0.075 (DWBA), 0.28 (1993Mo05).
1459 *5*	4	β_4=0.02 (CCBA), 0.07 (DWBA) (1982Ta16), −0.015 *15* (1986MoZR). 1993Mo05 report an unresolved doublet at 1464 keV.
1478 *5*		L=0 component present but fit to $\sigma(\theta)$ by CCBA is not good (1982Ta16). 1993Mo05 report an unresolved doublet at 1483 keV.
1693 *5*		
2165 *5*	(1)	Doublet. The second component is probably L=4.
2198 *5*	2	
2229[†] *5*	(0)	
2537 *5*	3	β_3=0.16 (CCBA), 0.144 (DWBA) (1982Ta16), 0.15 *1* (1986MoZR). β_3=0.16 (DWBA) (1970Pe09).
2570 *5*	(3)	
2602 *5*	2	
2669 *5*	4	
2690 *5*	(2+3)	
2748[†] *5*	(0)	
2833 *5*	4	β_2=0.05 (CCBA), 0.04 (DWBA). E(level): doublet. The second component is probably L=2.
2855[†] *5*	(0)	
2877 *5*	(5)	β_2=0.04 (CCBA), 0.034 (DWBA).
2936 *5*	(5)	E(level): doublet. The second component is probably L=2. β_2=0.073 (CCBA), 0.046 (DWBA).
2961 *5*		
2972 *5*		
2999 *5*	2	
3018 *5*	(2)	L: the shape of $\sigma(\theta)$ is inconsistent with L=2, but is similar to that for the 1203 level.
3049 *5*	4	β_2=0.065 (CCBA), 0.05 (DWBA).
3081 *5*	(5)	
3106 *5*	(5)	β_2=0.075 (CCBA), 0.046 (DWBA).
3143 *5*	3	
3179 *5*	3	
3203 *5*	2	
3225 *5*	4	E(level): proposed as L=(2,5) doublet by 1977Gu12 in (p,t). β_2=0.055 (CCBA), 0.04 (DWBA).
3277 *5*		
3342 *5*	4	β_2=0.035 (CCBA), 0.038 (DWBA).
3361 *5*	(5)	β_2=0.09 (CCBA), 0.048 (DWBA).
3386 *5*	3	

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^{74}Ge(p,p′),(pol p,p′) 1982Ta16 (continued)

^{74}Ge Levels (continued)

E(level)	L	Comments
3401 *5*	2	
3484 *5*		
3507 *5*	4	β_2=0.055 (CCBA), 0.04 (DWBA).
3580 *5*		
3626† *10*	(0)	
3636 *10*	(5)	β_2=0.05 (CCBA), 0.038 (DWBA).
3656 *10*		
3696 *10*	4	
3717† *10*	(0)	
3743 *10*	3	
3763 *10*	2	
3794 *10*	(0)	
3825 *10*	(2)	
3849 *10*	4	
3891 *10*	(2)	
3943† *10*	(0)	
3966 *10*	4	
4023† *10*	(0)	
4047 *10*	(5)	β_2=0.11 (CCBA), 0.056 (DWBA).
4100† *10*	(0)	
4111 *10*	(5)	β_2=0.05 (CCBA), 0.035 (DWBA).
4140 *10*		
4163 *10*		
4195 *10*		
4217 *10*		
4262 *10*		
4298 *10*		
4342 *10*		
4373 *10*		
4396 *10*		

† Weakly populated levels.