^{109}Ag(d,p) 1972Br52

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	G. Gürdal and F. G. Kondev	NDS 113, 1315 (2012)	1-Aug-2011

Reaction: ^{109}Ag(d,p) at ED=10.0 MeV. 200μg/cm^2, 99.26% enriched ^{109}Ag was used as a target. The protons were detected using 5, 2-mm-thick Si(Li) detectors. σ(E(p),θ) measurements were carried out at 28 angles between 20° to 170°. Measured: σ(E(p),θ), FWHM≈20 keV. DWBA analysis.
J^π(^{109}Ag)=1/2$^-$.

^{110}Ag Levels

E(level)[†]	L[‡]	S[#@]	Comments
1.15 *3*	2	0.59[&]	E(level): From Adopted Levels.
235 *4*	0	0.475	
269 *4*	2	(0.11)[&a]	
337 *4*	0	0.24	
378 *4*	2	0.625[&]	S: 0.73 if d3/2 ν single-particle orbital involved.
433 *4*	0+2		E(level): possible unresolved doublet. L: DWBA fit was generated assuming an admixture of 15% L=0 and 85% L=2 transfers. For L=2 transfer, S=0.875 (for d3/2 ν-orbital) or S=0.725 (for d5/2 ν-orbital). For L=0 transfer, S=0.035 (for s1/2 ν-orbital).
484 *4*	0	(0.07)[a]	
494 *4*			
536 *4*	0	0.57	
594 *4*	2	0.525	
661 *4*	2	0.285	
711 *4*	0	(0.04)[a]	
725 *4*			
751 *4*	2	0.095	
770 *4*			
793 *4*	2	0.155	
814 *4*			
864 *4*	2	0.16	
893 *4*			
925 *4*			
948 *4*	2	(0.24)[a]	
993 *4*	(2)	(0.05)	
1026 *4*	(2)	(0.135)	
1115 *4*	2	(0.205)[a]	
1165 *4*	2	(0.405)[a]	
1188 *4*			
1230 *4*	2	(0.13)[a]	
1263 *4*			
1315 *4*	0	(0.055)[a]	
1343 *4*			
1377 *4*			
1402 *4*	2	(0.285)[a]	
1480 *4*			
1513 *4*			
1535 *4*			
1568 *4*			
1659 *4*	2	(0.155)[a]	

[†] From 1972Br52, unless otherwise stated.
[‡] From comparison of experimental angular distributions with DWBA calculations.

Continued on next page (footnotes at end of table)

^{109}Ag(d,p) 1972Br52 (continued)

^{110}Ag Levels (continued)

S'=$S_J(2J+1)/(2J_i+1)$, where J_i=1/2.
@ For L=0, s1/2 ν single-particle orbital, for L=2, d3/2 ν single-particle orbital involved, unless otherwise stated.
& d5/2 ν single-particle orbital involved.
a Values are tentative. Reliable cross-section data can only be extracted for a few scattering angles because either cross-sections were small or data were masked by contaminant peaks.