

$^{59}\text{Co(p,d)}$ 1978Ik02,1965Ba29,1964Le10

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	C. D. Nesaraja and B. Singh	ENSDF	31-Oct-2015

$J^\pi(^{59}\text{Co g.s.})=7/2^-$.

1978Ik02: E=50 MeV beam produced and focused by Raiden magnetic spectrograph at RCNP; deuterons detected and identified by two proportional counters and plastic scintillator. Measured excitation energies. FWHM=15 keV.

E=22 MeV, FWHM=25-30 keV (1965Ba29); 18.5 MeV, FWHM=45 keV (1964Le10).

Measured: $\sigma(E)$ (1965Ba29), $\sigma(E,\theta)$ (1964Le10).

 $^{58}\text{Co Levels}$

E(level) [‡]	J^π	L	S [†]	Comments
0.0		#	#	
25		#	#	
90				
350		@	@	
440		@	@	
1030		1	0.19	
1750?				
2610		3	2.2	
5656 25				
5703 25	0 ⁺			E(level): analog of $^{58}\text{Fe g.s.}$
5722 25				
5736 25				
5835 25				

[†] From 1964Le10.

[‡] From 1965Ba29 for levels below 1100 keV; from 1964Le10 for levels between 1700-3000 keV and from 1978Ik02 for levels above 3000 keV.

L=1, S=0.42 for g.s.+25 doublet.

@ L=1, S=0.92 for 350+440 doublet.