

$^{60}\text{Ni}(\text{p},\alpha)$ 1979Sm03,1978Jo08,1976Ma24

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. R. Bhat	NDS 85, 415 (1998)	24-Sep-1998

1979Sm03: E= 30 MeV, FWHM= 45 keV; ΔE -E counter telescope; absolute cross section uncertainty 10%; DWBA analysis.

1978Jo08: E=15– 17 MeV, FWHM= 15 keV; magnetic spectrograph, proportional counter telescope; cross section uncertainty 25%; DWBA.

1976Ma24: E=13– 16 MeV, FWHM=10– 14 keV; magnetic spectrograph.

Other: 1980Ta06. See also 1977Au04.

 ^{57}Co Levels

E(level) [†]	J ^π [‡]	L [#]	C ² S(rel) [@]	E(level) [†]	J ^π [‡]	C ² S(rel) [@]
0	7/2 ⁻ &	3	100.0	3909.2 12	(7/2 ⁺)	17.1
1223.9 7	9/2 ⁻ &		2.3	3918.2 14		
1376.9 7	3/2 ⁻ &		0.6	3990.8 12		
1504.3 7				3999.4 16		
1689.8 7	11/2 ⁻ &		7.9	4036.5 12	(7/2 ⁻)	3.7
1757.3 7	3/2 ⁻ &		(0.6)	4046.1 13		
1897.2 7	7/2 ⁻ &		8.9	4057.5 14		
1919.2 7	5/2 ⁻ &			4111.2 11		
2133.0 8				4186.9 12		
2311.0 8	7/2 ⁻ &		2.9	4216.8 12		
2484.6 8				4237.5 12		
2523.3 8				4250.8 12		
2559.2 8	(1/2 ⁻)		4.6	4271.6 13		
2610.8 9				4284.1 13		
2723.0 9				4296.9 13	(7/2 ⁻)	7.7
2732.2 10				4308.0 13		
2744.0 10				4329.5 12		
2803.5 9				4356.8 12		
2878.8 9				4376.5 12		
2977.9 10	1/2 ⁺ &	0	42.1	4391.3 13		
3106.8 10				4398.7 14		
3121.4 9				4416.2 12		
3164.9 11				4438.1 12		
3176.5 11				4447.9 13		
3184.1 12	(7/2 ⁺)		11.5	4465.6 12		
3246.3 10				4475.1 20		
3264.0 10				4496.8 12		
3272.2 11				4511.4 15		
3356.6 10				4519.9 14		
3393.7 10	(9/2 ⁺)		8.9	4550.1 12		
3460.5 10				4575.8 18		
3521.9 10				4587.3 15	(5/2 ⁺)	10.6
3540.4 10				4597.3 25		
3553.2 11	3/2 ⁺ &	2	36.2	4608.4 23		
3622.3 11				4619.5 14		
3671.5 10				4644.9 13		
3681.3 11				4659.2 13		
3719.6 11				4674.5 14	(7/2 ⁻)	7.6
3762.0 11				4700.6 13		
3769.6 13				4719.5 13		
3833.7 11	(1/2 ⁻)		1.2	4752.7 13		
3854.1 11				4761.9 14	(1/2 ⁻)	1.2

Continued on next page (footnotes at end of table)

$^{60}\text{Ni}(\text{p},\alpha)$ 1979Sm03,1978Jo08,1976Ma24 (continued) **^{57}Co Levels (continued)**

<u>E(level)[†]</u>	<u>E(level)[†]</u>	<u>J^π[‡]</u>	<u>C²S(rel)[@]</u>	<u>E(level)[†]</u>	<u>J^π[‡]</u>	<u>C²S(rel)[@]</u>
4772.1 15	4880.9 14			4971.0 15		
4793.4 13	4911.4 13			5100 20	(7/2 ⁺)	26.4
4805.2 17	4921.9 14			5520 20		
4842.0 14	4933.7 15			7230 20	(5/2 ⁻)	10.7
4852.8 17	4948.1 15	(3/2 ⁺)	12.3			
4871.6 14	4959.6 14					

[†] From 1976Ma24.[‡] Tentative assignment assumed for DWBA, except as noted.

From 1978Jo08.

[@] From 1979Sm03.& From $^{57}\text{Fe}(\text{p},\text{n}\gamma)$ or $^{58}\text{Ni}(\text{t},\alpha)$.