^{59}Co(^{3}He,p) 1968Co01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh	ENSDF	20-Jan-2020

No changes made since the 2015 update.
1968Co01: E=11.65 MeV. Measured σ(E(p),θ), 16 angles from 7.5° to 120°, magnetic spectrograph, FWHM≈60 keV.
J^{π}(^{59}Co g.s.)=7/2^{-}.

^{61}Ni Levels

E(level)[†]	L	dσ/dΩ (μb/sr)[‡]	E(level)[†]	L	dσ/dΩ (μb/sr)[‡]	E(level)[†]	L	dσ/dΩ (μb/sr)[‡]
0		9.6	2020 *20*	0	2.8	3690 *20*		5.3
65 *20*	0	10.6	2030 *20*		1.7	3740 *20*		19.8
290 *20*		4.5	2130 *20*		1.6	3807 *20*		6.3
660 *20*		2.6	2420 *20*		<0.9	3950 *20*	@	8.0
920 *20*	0	9.4	2480 *20*		1.4	4010 *20*		11.3
1020 *20*		3.1	2540 *20*		<0.7	4090 *20*		11.8
1100 *20*		1.7	2640 *20*		1.5	4180 *20*	@	30.8
1140 *20*		1.0	2920 *20*		5.2	4400 *20*		13.8
1190 *20*		1.7	3060 *20*		1.6	4470 *20*	@	53.4
1470 *20*		1.7	3290 *20*	@	19.1[#]	4660 *20*		12.1
1610 *20*	0	4.7	3380 *20*	@	19.1[#]	4760 *20*		21.4
1740 *20*		2.0	3480 *20*		21.8	4840 *20*		15.3
1810 *20*		<0.5	3540 *20*	@	31.1	4940 *20*	@	46.1
2000 *20*		1.5	3630 *20*		13.5	5540 *20*	@	(45.1)

[†] Above 2920 excitation energy, level energies given here corresponds to multiplets. According to 1968Co01, one-to-one matching of level energies in their study and those from previous studies is difficult to make.
[‡] Values are at 7°.
[#] Combined value for 3290+3380 levels.
[@] L=0 component present in the observed group.