

$^{64}\text{Ni}(\text{p},\alpha\gamma)$ 1970Co21

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Kazimierz Zuber, Balraj Singh		NDS 125, 1 (2015)	25-Jan-2015

1970Co21: E(p)=10 MeV. Measured E_γ , I_γ , E_α , $\alpha\gamma$ coin, semi, enriched target.

 ^{61}Co Levels

E(level) [†]	J^π [‡]	E(level) [†]	J^π [‡]	E(level) [†]	J^π [‡]	E(level) [†]
0	$7/2^-$	1285 3		1647 3	$3/2, 5/2$	2232 3
1025 3	$3/2^-$	1325?#	$(1/2)^{\#}$	1891 3	3/2 to 9/2	2302?#
1205 3	$3/2^-, 5/2^-$	1619 3	$7/2^-$	1952 3	$1/2^-, 3/2^-$	

[†] From table 4 of 1970Co21, unless otherwise stated.

[‡] As listed in 1970Co21 from their experiment and previous data.

from 1969Co05.

 $\gamma(^{61}\text{Co})$

$E_i(\text{level})$	J_i^π	E_γ [†]	I_γ	E_f	J_f^π	$E_i(\text{level})$	J_i^π	E_γ [†]	I_γ	E_f	J_f^π
1025	$3/2^-$	1025	100	0	$7/2^-$	1891	3/2 to 9/2	606	42 8	1285	
1205	$3/2^-, 5/2^-$	1205	100	0	$7/2^-$			1891	50 8	0	$7/2^-$
1285		1285	100	0	$7/2^-$	1952	$1/2^-, 3/2^-$	747	100	1205	$3/2^-, 5/2^-$
1325?	$(1/2)$	300@		1025	$3/2^-$			1952#@	<20	0	$7/2^-$
1619	$7/2^-$	332	45 8	1285		2232		947	16 5	1285	
		1619	55 8	0	$7/2^-$			1027 [‡] @	<66 [‡]	1205	$3/2^-, 5/2^-$
1647	$3/2, 5/2$	322@		1325?	$(1/2)$			1207 [‡] @	<66 [‡]	1025	$3/2^-$
		622	12 4	1025	$3/2^-$			2232	18 7	0	$7/2^-$
		1647	88 4	0	$7/2^-$	2302?		1277@		1025	$3/2^-$
1891	3/2 to 9/2	244	8 3	1647	$3/2, 5/2$						

[†] From level-energy differences.

[‡] According to 1970Co21, 2232-keV level decays to the 1025-keV level or to the 1205-keV level, or to both. The total intensity of these two possible branches is 66 9.

This γ is not listed in Adopted dataset since it is not confirmed in any other study, and even in this dataset, only an upper limit of intensity is given.

@ Placement of transition in the level scheme is uncertain.

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Legend

Level Scheme

Intensities: % photon branching from each level

-----► γ Decay (Uncertain)

