

$^{59}\text{Co}(d,^3\text{He})$ 1982Ni01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Caroline D. Nesaraja, Scott D. Geraedts and Balraj Singh		NDS 111, 897 (2010)	12-Jan-2010

1982Ni01: E=33.3 MeV, FWHM \approx 40 keV. Measured $\sigma(E,\theta)$.
 $J^\pi(^{59}\text{Co})=7/2^-$.

 ^{58}Fe Levels

E(level)	L	S †	E(level)	L	S †	E(level)	L	S †
0.0	3	0.25	3886 ‡	3	1.56	5020 50	1+3	0.03+0.083
811 20	3	0.84	4090 20	1+3	0.040+0.095	5200 50	1+3	0.027+0.52
1675 20	1+3	0.018+0.047	4310 20	1	0.043	5310 50	0+2	0.13+0.29
2076 20	3	0.43	4440 20	0	0.38	5400 50	2	0.88
2600 20	3	0.23	4610 20	0	0.36	5600 50	1+3	0.01+0.15
3084 20	3	0.084	4710 20	1+3	0.058+0.068	5710 50	0+2	0.12+0.21
3600 20	3	0.94	4830 20	3	0.052	6100 50	0	0.44
3760 20	1+3	0.053+0.79	4940 20	3	0.13	6200 50	0	0.20

† $2s_{1/2}$, $2p_{3/2}$, $1d_{3/2}$, $1f_{7/2}$ orbitals assumed for L=0, 1, 2, 3, respectively.

‡ Known energy used for calibration.