^{58}Ni(d,^{2}He) 2005Ha03,2004Ha01

History

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

2005Ha03 (also 2004Ha01,2003Wo10,2001Wo07): E=170 MeV. Measured ^{2}H spectra, $\sigma(\theta)$ from 0.5° to 5.5° (c.m.). FWHM=130 keV. Detection system: focal-plane detection system composed of two vertical drift chambers, each having 240 wires; and focal-plane polarimeter consisting of two planes of plastic scintillators, four multiwire proportional chambers and a graphite analyzer. Deduced Gamow-Teller strengths. DWBA analysis, large-scale Shell-model calculations.

^{58}Co Levels

B(GT) values (Gamow-Teller strengths) are from 2004Ha01.

E(level)[†]	J^{π}[#]	L	dσ/dΩ mb/sr (at 0.5°)[‡]	Comments
1050	1^+	0+2	0.140 *9*	B(GT)=0.15 *1*. dσ/dΩ=0.159 mb/sr *9* (2004Ha01). E(level): probable parent of isobaric analog of 9835 in ^{58}Ni.
1435	1^+	0	0.078 *6*	B(GT)=0.09 *1*. E(level): probable parent of isobaric analog of 10211 in ^{58}Ni.
1729	1^+	0	0.148 *14*	B(GT)=0.16 *2*. E(level): probable parent of isobaric analog of 10492 in ^{58}Ni.
1868	1^+	0	0.648 *20*	B(GT)=0.72 *5*. E(level): probable parent of isobaric analog of 10664 in ^{58}Ni.
2249	1^+	0	0.047 *4*	B(GT)=0.05 *1*. E(level): probable parent of isobaric analog of 11003 in ^{58}Ni.
2660 *25*	1^+	0+1	0.055 *5*	B(GT)=0.06 *1*. Additional information 1. E(level): probable parent of isobaric analog of 11423 in ^{58}Ni.
2860 *25*	1^+	0(+1)	0.143 *9*	B(GT)=0.17 *1*. Additional information 2. E(level): probable parent of isobaric analog of 11661+11683 in ^{58}Ni.
3100 *25*	1^+	0(+1)	0.125 *8*	B(GT)=0.15 *1*. Additional information 3. E(level): probable parent of isobaric analog of 11883 in ^{58}Ni.
3410 *25*	1^+	0+1	0.062 *7*	B(GT)=0.07 *1*. Additional information 4. E(level): probable parent of isobaric analog of 12197 in ^{58}Ni.
3520 *25*	1^+	0+1+2	0.076 *9*	B(GT)=0.09 *1*. Additional information 5. E(level): probable parent of isobaric analog of 12293 in ^{58}Ni.
3625 *25*	1^+	0+1+2	0.058 *7*	B(GT)=0.07 *1*. dσ/dΩ=0.067 mb/sr *7* (2004Ha01). E(level): probable parent of isobaric analog of 12386 in ^{58}Ni.
3900 *25*	1^+	0+1	0.060 *6*	B(GT)=0.07 *1*. Additional information 6. E(level): probable parent of isobaric analog of 12636 in ^{58}Ni.
4030 *25*	1^+	0	0.155 *10*	B(GT)=0.19 *1*. E(level): probable parent of isobaric analog of 12738 in ^{58}Ni.

[†] Rounded values from Adopted Levels for levels up to 2300, above this energy values are from 2005Ha03 (also 2004Ha01).
[‡] Values are from 2005Ha03, uncertainties from 2004Ha01. Corresponding values in 2004Ha01 are the same, except in a few cases.
[#] From dominant L=0 component. All states are interpreted as T=2, $J^{\pi}=1^+$.