

${}^{89}\text{Y}(\alpha, {}^3\text{He})$ 1972Go11

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, E. A. Mccutchan		NDS 165, 1 (2020)	1-Mar-2020

$J^\pi({}^{89}\text{Y})=1/2^-$.

1972Go11: E=65.7 MeV. Measured $E({}^3\text{He})$, $\sigma(\theta)$, $\theta=15^\circ$ and 20° . Magnetic spectrograph, nuclear emulsions. FWHM \approx 60 keV.

 ${}^{90}\text{Y}$ Levels

<u>E(level)†</u>	<u>L†</u>	<u>S'‡</u>	<u>E(level)†</u>	<u>L†</u>	<u>S'‡</u>	<u>E(level)†</u>	<u>L†</u>	<u>S'‡</u>
0	2	2.47	2088 5	5	0.26	3004 $^\#$ 5	(2,5)	0.72,1.84
203 5	2	3.53	2245 5	5	2.28	3052 5		
1221 5			2475 5			3160 $^\#$ 5	(2,5)	0.58,0.18
1376 5			2517 $^\#$ 5	5	0.48	3347 $^\#$	(4)	0.43
1574 5			2626 5			3516 5	5	0.66
1646 5			2753 $^\#$ 5	(2,5)	0.17,0.13	3590 5		
1762 5			2840 $^\#$ 5	4	1.13	3634 $^\#$ 5	(4,5)	1.12,0.50
1814 5			2873 5			4069 5	5	0.84
1962 5	5	1.55	2939 5					

† 1972Go11 report values for excitation energies from their (d,p) measurement presented in the same article.

‡ From comparison of 15° data with DWBA calculations. Data normalized to ${}^{89}\text{Y}(\text{d,p})$ results for the 203 keV state. Data for 2517 keV, 2840 keV, 3004 keV and 3634 keV were corrected for unresolved transitions before analysis.

$^\#$ Unresolved level.