^{156}Gd(^{3}He,α) 1971Lo01

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	N. Nica	NDS 160, 1 (2019)	21-Oct-2019

E(^{3}He)=20.3 MeV. Enriched (93.58% ^{156}Gd) metallic targets of thickness 100-150 μg/cm^2 evaporated onto thin carbon backings. Reaction products were analyzed in a broad-range magnetic spectrograph and recorded in photographic plates. Spectra were measured at two or more angles. The resolution achieved was ≈30 keV.

Other measurement: 1984Re04.

^{155}Gd Levels

E(level)[†]	J$^{\pi}$[‡]	L	S[#@]
0.0	3/2$^-$		<1
≈105	3/2$^+$	2,4	≈10
119 *15*	11/2$^-$		38
214 *15*	13/2$^+$	6	66
263 *15*	3/2$^+$		17
≈369	1/2$^+$		≤3
480 *15*			12
1297 *15*	7/2$^+$		7
1581 *15*	11/2$^-$	5	39

[†] 1971Lo01 estimate ΔE≈15 keV. Since the g.s. is weakly populated in (^{3}He,α) the level energies were measured relative to that of the 13/2$^+$ state, which was taken from 1967Tj01.

[‡] From adopted values.

[#] Label=dσ/dΩ(μb/sr).

[@] Values at θ=60°.